

Petersen's Photographic Magazine

MAY, 1979



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TAKE YOUR CAMERA ON VACATION

- HOW TO PLAN YOUR TRIP
- EQUIPMENT YOU REALLY NEED
- HOW TO GET MEMORABLE RESULTS



WIN THE CAMERA OF YOUR CHOICE
ENTER PHOTOGRAPHIC'S SUPER SWEEPSTAKES

TROPICAL PHOTOGRAPHY
TAME THE ELEMENTS AND RECAPTURE PARADISE

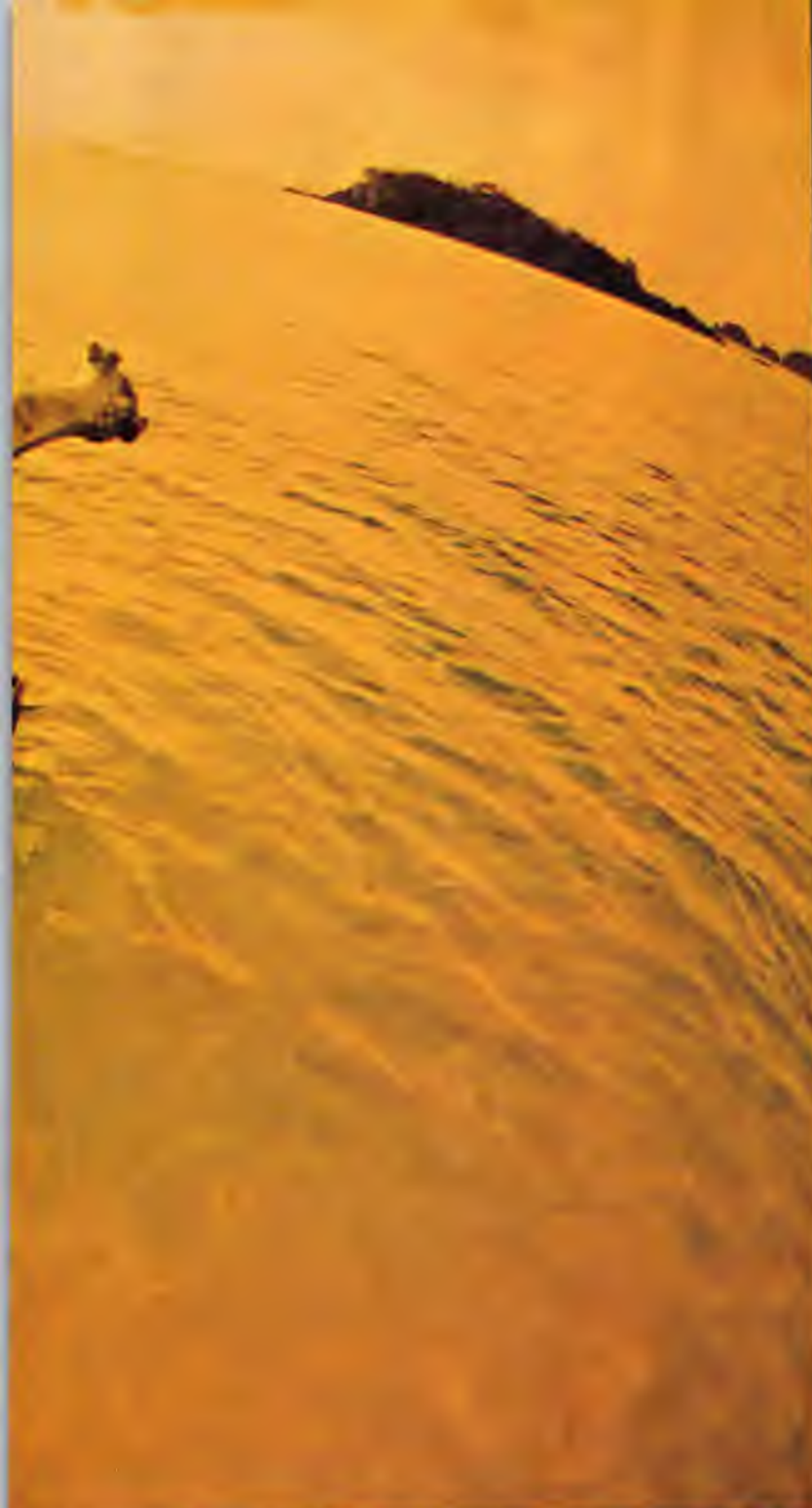
WHO'S WHO AT THE ZOO
CAN'T GET TO ZAMBOANGA? TRY YOUR LOCAL ZOO

BONUS SPECIAL
1979 WORKSHOP CALENDAR





Introspective photogra Confidence



At last, everything is perfect. The feeling... the light, the subject... all blend into an image created in your mind. Your finger moves, instinctively. And, your Nikon responds, instantly, capturing on film both the mood and a special moment in time.

Today, an ever increasing number of creative individuals are turning to Nikon compacts to turn feelings in photographs. Many of them are inspired by the example of professionals, for whom Nikon has long been the overwhelming choice. Indeed, many a pro has found one of these "personal size" Nikon slrs the ideal complement to his own Nikon system. They are engineered to the same, high standards of precision to instill the same confidence in their supremely reliable Nikon performance. And, of course, they share the almost endless capabilities of the same famous Nikon system. Both Nikon compacts offer the reliable accuracy of true Nikon center-weighted metering. Their dual light sensors assure consistent exposure uniformity under virtually any light conditions. Operating controls are adult-sized and positioned at your fingertips; there's no groping or fumbling to mar your concentration.

The moderately priced Nikon FM features gallium photo diodes, with always bright LED indicators allowing exposure control within ± 2 EV through the finder. In the electronic Nikon FE, silicon photo diodes are used to give you automatic exposure control with any reflex-viewing Nikkor lens, along with special compensation features for unsurpassed creative exposure flexibility.

Both the Nikon FM and FE accept the low-cost MD-11 motor drive for firing rates up to 3.5 frames per second (even multi-exposure effects are easily created at motor-drive speed). For auto-flash photography, there's the Nikon SB-10 thyristor unit, which automatically programs the FE shutter for correct flash synch.

And, you can give eloquent expression to your inner visions through nearly sixty Nikkor lenses, with confidence in their world-famous sharpness and consistent color fidelity.

Visit your Nikon dealer. And, ask also about the traveling Nikon School, where you can gain new insights into your own creativity. Or, write to Nikon Inc., Dept. N-4, Garden City, New York 11530. Subsidiary of Ehrenreich Photo-Optical Industries, Inc., (In Canada: Nikon Division, Anglophoto Ltd., P.Q.)

The confidence of Nikon.
You can't touch it. But it will touch you.

phy with the
of Nikon

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CASH REBATES ON NIKON CAMERAS

\$40 ON NIKON FE AUTO COMPACT.
\$30 ON NIKON FM CLASSIC COMPACT.
\$25 ON MATCHING NIKON MOTOR DRIVE.

This is the chance of a lifetime to get started in Nikon System photography. We're offering big cash rebates on Nikon compact cameras and their matching motor drive. The same great cameras that are making photographic history every day. With our cash rebates, it adds up to substantial cost-savings for you!

Just hurry down to your Nikon dealer, and make your best deal on the Nikon compact you've always wanted. After you've made your purchase, mail us the special Rebate Application...and we'll rush your Nikon Rebate Check direct to you!

Bigger Rebates With Motor Drive

The savings are even greater when you buy a Nikon compact camera with its high-performance MD-11 motor drive. (The MD-11 is designed for use with both FM and FE cameras.) When you choose the Nikon FE and MD-11 you get a total rebate of \$65. The Nikon FM and MD-11 makes you eligible for a \$55 rebate.

If you already own either Nikon compact camera, you can now add the MD-11 for automatic fire power up to 3.5 f.p.s. and get a \$25 rebate.

No other equipment purchases are necessary. Only new Nikon FE and Nikon FM camera bodies and Nikon MD-11 motor drives are included in this exciting rebate offer. You can purchase each as a separate unit to start or continue building your personal Nikon system.

But you must act now!

This rebate program runs from February 19 through May 31, 1979. It's an opportunity you won't want to miss — to start off with truly professional Nikon equipment at tremendous savings!

Offer extended only through participating Nikon dealers in the United States, Puerto Rico and U.S. Virgin Islands. For complete details, visit your participating Nikon dealer. Nikon Inc., Garden City, New York 11530. Subsidiary of Ehrenreich Photo-Optical Industries, Inc. © Nikon Inc. 1979

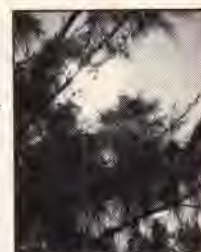


EXPIRES MAY 31, 1979

this month

FEATURES

Spec Sheet	40
Konica FS-1 camera	
Tropical Photography	42
How to get dreamy shots in steamy places—by Bill Hurter	
Spec Sheet	54
Soligor 70-160mm zoom & macro, CD 70-222mm zoom & macro, and 300mm Compact "G" lenses	
Portraits of Foreign Places	56
Reach into a culture and bring back treasured memories—by Peggy Sealton	
Be the Well-Prepared Traveler	65
What to do after you know where to go—by Charlene Marmer Solomon	
Robert Laura: Natural Landscapes	73
National parks portfolio	
Talking Tech	82
"Confucius say . . ."—by David Brooks	
Blueprint	87
How to make a baby broad light from your flash—by Tom Cook	
1979 Seminars & Workshops Calendar	89
A bonus listing of classes and courses around the country	
The Yob System, Part IV	97
Applying the system to exposure technique—by Parry C. Yob	
Tips for Great Zoo Photographs	104
How to capture wild game without a struggle—by Peter B. and Harriet Kaplan	



PAGE 42



PAGE 56



PAGE 65



PAGE 73



PAGE 104



PAGE 111

DEPARTMENTS

On the Scene	4	Far East Journal	30
Trip the Light Fantastic		Konishiroku—106 Years Young	
Guide Lines	8	Product Proof Sheet	32
A Good Nickel Cigar		Other Voices	37
Tools of the Trade	10	In Sight	84
Controlling Color Temperature		Workshop-ing	
Where the Action Is	17	Camera on Campus	102
Publishing a Book		Visual Literacy Is Your Business	
Club Close-Ups	18	Gallery '79	111
Branching Out		Vintage Viewfinder	114
Silver Dreams	20	Three for the Road	
The Portrait: Aspects of Style		Advertising Index	116
Focus on Filmmaking	24	One to One	118
You Can Take It with You		Making Basic Choices	
Self-Assignment	26	Short Exposures	119
Ten Tips for Travel Pics			
Electronically Yours	28		
A Good One for the Road			

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 SUBSCRIPTION RATES: U.S.: Military, Possessions, 1 year \$10.95, 2 years \$19.00; Canada, other countries, 1 year \$13.95, 2 years \$25.00. Subscription enquiries, phone (213) 657-5100.
 CHANGE OF ADDRESS: Give 6 weeks' notice. Send name of magazine and address imprint from recent issue or state exactly how label is addressed. Send old address as well as new. Mail to PhotoGraphic Magazine, 6725 Sunset Blvd., Los Angeles, California 90028.

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ON THE SCENE

the EDITORS

TRIP THE LIGHT FANTASTIC



HURTER



SOLOMON



SEALFON



YOB



COOK



LAURA

The tie between the photographer and tourism is so strong that often any person with a camera over his or her shoulder is labeled a "tourist" whether he's in Hammerfest, Hoboken or his hometown. Surely nothing motivates anyone to pick up a camera more quickly than a trip or vacation. We all hope to capture those happy moments on film to save and savor over and over again. Following the gypsy in our soul has an almost guaranteed side benefit for photographers: In a new locale we can recharge our vision—then when we return home we can cast a fresh eye on familiar things around us and see wonderful things we never saw before.

Associate Editor **Bill Hurter** wanted to recharge his photographic vision and found he had no trouble doing so in his version of paradise. As in any humid, tropic climate, however, there can be trouble for photo buffs, and in "Tropical Photography," beginning on page 42, he tells how to avoid those pitfalls. . . .

The gypsy has a big chunk of Managing Editor **Charlene Marmer Solomon's** soul and has led her to fascinating ports both east and west. She shares what she has learned about leaving cares and woes behind with careful planning. "Be the Well-Prepared Traveler" begins on page 65. . . .

Preserving vivid, warm and wonderful memories is East Coast Editor **Peggy Sealfon's** goal when she travels the globe. Turn to page 56 and learn how to do it in detail in "Portraits of Foreign Places." . . .

Her suggestions are just as useful closer to home, but you may want something else to occupy your time if you can't hit the road right now. **Parry C. Yob** offers Part IV of "The Yob System" to fill the gap. This installment deals with exposure and begins on page 97. . . . Another useful project if you're staying home can be found in this month's "Blueprint: How To Build a Baby Broad Light from Your Flash" on page 87 by contributor **Tom Cook**. . . .

A wonderful adventure doesn't have to be around the world—it could be as close as your local zoo. Professional photographer **Peter B. Kaplan** and **Harriet Kaplan** tell how to make the most of your camera on such a trip in "Tips for Great Zoo Photographs" on page 104. . . .

Our beautiful portfolio presentation, "Natural Landscapes," by **Robert Laura** gives tribute to the glorious beauty of our national parks. Photographer Laura documented the wonders he found and it's all just waiting for you—both in our parks and on page 73. . . .

Just in case you haven't yet thought of any place you'd like to go with your camera, browse through our special bonus insert, "1979 Seminars & Workshops Calendar." You'll find just the relaxing location and stimulating photo information you want by turning to page 89. . . .

Take a trip. Do it soon. It's an investment in your future you'll never regret. As a well-seasoned traveler once said, "No matter what my future situation or financial circumstances, when I've traveled—I'm the richest person in all the world!"

COMING NEXT MONTH:

LYRICAL FLOWERS—Make flower photos as beautiful as the blossoms.

THE YOB SYSTEM, PART V—Filters, flash and paper find a place in the scheme of things.

BASIC FLASH—How to use it in easy pictures, "Basic 35mm Single-Lens Reflex Photography" series.

PLUS:

SEQUENCES—The concept and the execution.

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This month's cover was shot from high atop Sugar Loaf Mountain over looking Rio de Janeiro by free-lance-photographer/writer team of Michele and Tom Grimm/Afterimage on a recent trip to Brazil. Tom and Michele's photograph illustrates the many exciting travel articles appearing in this

issue that will have you taking great travel vacation pictures in no time flat. The Grimm's cover photo was shot with a Leicaflex camera with a 35mm Summicron lens on Kodak Kodachrome 25 Film.

THE WORLD'S ONLY TOTAL-SYSTEM 110 SLR.

WITH INTERCHANGEABLE LENSES,
AUTO-WINDER, AUTO-FLASH AND PROGRAMMED AUTOMATIC EXPOSURE.



Camera shown 75% of actual size.

groups, and it's the equivalent of a normal 50mm lens in the 35mm format. Also available are a wide-angle 18mm f/2.8 lens, perfect for scenics or interiors, with 6 elements in 6 groups (35mm equivalent: 35mm), and a moderate telephoto 50mm f/2.8 lens, perfect for portraits and candids, with 5 elements in 5 groups (35mm equivalent: 100mm).

All lenses are bayonet-mount, so changing them is literally a snap.

A variety of close-up lens attachments are also



18mm wide-angle lens.



24mm standard lens.



50mm telephoto lens.

available, so you can take terrific macro shots of stamps, coins, or anything small.



synchronizes the shutter speed and aperture of the camera. It provides over 250 auto exposures (from 2.6' to 15'), all with just two 1.5V AA Alkaline batteries.

ACCESSORIES

Individual UV and skylight filters may be obtained for both standard and wide-angle lenses. Collapsible lens hoods, camera pouch, and eyepiece correction lenses as well as closeup lenses are also available.

The System 10 combines the sophistication and versatility of a modern 35mm SLR with the compact ease of the 110 film format.



To the professional and the advanced amateur it's an excellent second camera that fits anywhere, and could even become your camera of choice.

To the world of photography, it's a major breakthrough. But then, that's no surprise. After all, it's made by Pentax.

Pentax System 10. (Available in limited quantities only, at select photographic stores.) For more information write: Pentax System 10, P.O. Box 2585, Littleton, Colorado 80161.

PENTAX®

SYSTEM 10™

WINDER 110

The Pentax Micro Power Winder can fire off exposures at 1 fps. It's compact, light, very quiet. It even automatically advances your film to the



Catch the action with the Micro Power Winder.

first frame. It's powered by two penlight AA batteries, which deliver over 1,200 exposures. And after the last exposure on the cartridge, no rewinding is necessary. Just pop out the cartridge and get it processed.

PROGRAMMED FLASH

The Auto Flash AF 130 P threads and locks into a socket on top of the System 10. It's a "dedicated" flash which automatically

PROGRAMMED AUTO EXPOSURE

System 10's automatic exposure system is truly a wonder. Both aperture setting and shutter speed are programmed by the camera in accordance with the lighting conditions. By ingeniously combining the shutter with the aperture blades, Pentax engineers have created an exposure system that's amazingly sensitive and accurate, yet incredibly simple to use. System 10 even employs Silicon Photo Diodes, as opposed to the old, slow-responding CdS cells.

Shutter speeds vary from 1 sec. to 1/750 sec., while EVs range from 3 to 17 (ASA 100 with Pentax 110 24mm f/2.8 standard lens). Apertures range from f/2.8 to f/13.5.

AN SLR VIEWFINDER

As unbelievable as it may sound, the image in the viewfinder of the System 10 rivals that of even the best 35mm SLRs, in terms of size, brightness, clarity and contrast.

Inside, you'll find a surprisingly large, split-image finder, surrounded by a matte glass field. You'll also see either a green or a yellow LED in the lower right corner. The green LED lights up when there's enough light for shooting at shutter speeds faster than 1/30 sec. If an exposure below that speed is required, the yellow LED lights up, meaning a tripod or flash is suggested to shoot your picture.

The split-image finder, the LEDs, and your subject are all you'll see in the viewfinder. No needles. No clutter. All you do is focus and shoot.

SUPERB LENSES

System 10 comes with a standard Pentax 24mm f/2.8 lens. It has 6 elements in 5

Shadow dancing, with the



Complete Light Machine.™

Another example of the creative versatility that has made the 283 Electronic Flash System the best selling Vivitar flash.

The Complete Light Machine lets you take a decidedly unorthodox approach to electronic flash photography. It's every bit as portable as the less sophisticated shoe-mount electronic flash units that came before it. But because it's a complete lighting system, with an intriguing array of power options, special effects accessories, and pro-type tricks of the trade attachments, you can use studio type lighting techniques almost anywhere you go.

To create the photograph on the opposite page, the photographer spread a truck-load of sand on his studio floor. That technique is a bit difficult if your studio happens to be your living room. Neither your spouse nor your landlord is likely to understand and the clean-up may be too much for your vacuum cleaner. After creating his mini-desert, the photographer positioned his model and proceeded to light the scene with a Vivitar 283 Complete Light Machine. He placed three 283 flash units with 28mm Flash Lenses inserted in each unit's Lens/Filter Adapter above and behind the model. The units were separated by about one foot, one above the other. In the Lens/Filter Adapter on each unit was a different colored flash

filter in addition to the 28mm flash lens. Another 283 flash with 135mm flash lens was positioned in front of the model for fill light. The camera angle was quite high, well above the single flash unit. The multi-color backlight units were fired in sync with the fill unit by cordless SL-2 remote flash triggers activated by the fill unit. The three units behind the model cast the multi-colored shadows on the light sand while the front unit gave the proper fill exposure for flesh tones and the pastel costume.

Vivitar 283 Auto Thyristor Electronic Flash — Guide Number (ASA 25) 60. Features: Thyristor circuitry. Automatic exposure in 4 f-stops, plus Manual. Remote sensor. Sufficient light indicator signals correct flash exposure. Open flash control. **Optional Accessories:** **Charge 15** — recharges the NC-3 NiCad battery pack in only 15 minutes. **SB-4AC**

Adapter — Converts 110-125V to power the 283. **LVP-2 Low Voltage Battery Pack** — Holds 4 Alkaline or 4 NiCad "D" batteries for extended shooting. **Vari Power**

Module VP-1 —

Gives continuously variable flash power in the manual mode from

full power to 1/84 power. **Soft Light/Bounce Diffuser** — Holds a standard

90% reflectance card for soft light portraits and still lifes. **Lens/Filter Adapter** — Positions Flash Filters and Variable Angle Flash Lenses over the flash head. **Flash Filter Kit** — Red, Blue, Yellow, UV, 4X ND, Type B Conversion Filters. **Flash Lens Kit** — Four flash lenses match flash coverage to various camera lenses. 24-28mm, 28-35mm, 70-135mm, 135mm+.

SL-2 Remote Flash Trigger — Cordlessly fires remote flash units in sync with main flash. **Quick Release Pistol Grip and Camera Brackets** — For use as off-camera flash

either direct or bounce. The flash shoe rotates 360°. Available in both 35mm and 6 x 6 models. Accepts an optional cable release.



3 ea. 283's with 28mm lenses 1 foot apart vertically.



Colored filters
Red
Blue
Yellow.



Subject



283 with 135mm flash lens.



Vivitar 283

The Complete Light Machine.

Vivitar Corporation, 1630 Stewart Street, Santa Monica, CA 90406. In Canada: Vivitar Canada Ltd./Ltée © Vivitar Corp., 1979

□ At the somewhat calculated risk of revealing my semiadvanced years, I remember, in my formative years, becoming neurotic about owning a "real" enlarger. True, I had improvised something out of tin cans and camera bodies that resembled an enlarger and managed to make big 'uns out of little 'uns, but I knew that what I really needed was a professional unit.

My nights were marred by a tossing restlessness. My days were haunted by an image of shining metal, nestled in the corner of my darkroom, that was a bona fide "store-bought" enlarger. I scrimped, saved and did without. I needed a *real* enlarger!

Many months (and a lucrative birthday) later I had managed to save enough to buy a Federal No. 312 enlarger. It was magnificent! It had a diffusion system, an honest-to-goodness enlarging bulb, a genuine negative carrier made out of metal (not something improvised from heavy cardboard), and a *real* enlarging lens. It was a delight.

By today's standards it was probably as primitive as my makeshift enlarger. But it worked. The negative carrier had a built-in focusing target to assist in making critical focusing adjustments, and I could change the size of the magnification by merely sliding the head assembly up or down a shining metal column. I did some good work with that machine.

Later, I learned of a man who was making something novel and unique for enlargers: a cold-light grid, which promised even more quality than was possible with what I had. As he and I both lived in Brooklyn, New York, I took it upon myself to give him a call. We made an appointment and I went to his home. His basement was a workshop where he designed these ingenious devices. He fitted one to my Federal No. 312 enlarger, and I had my first experience with the thrill of upgrading a piece of equipment. Today that man, Andy Azan, continues to supply cold grid lamps under the name Aristo Grid Lamp Products, Inc., and I still have that old unit he fitted to my enlarger. It still buzzes and glows happily.

Eventually I added a sophisticated enlarging lens to the Federal No. 312 enlarger. We did some great work together. As time wore on, and as I became more and more involved with photography, my requirements also grew. Eventually I graduated to a highly sophisticated 4x5 enlarger that accepted all of my various negative requirements, could handle a color head, and made enlarging as easy as slipping on ice.

Guide Lines

PAUL R. FARBER

A GOOD NICKEL CIGAR

The point is this: Today, young photographers, or photographers who are young in experience, are faced with the same problems I was faced with years ago. They want equipment, to be sure—expensive, if possible. But that's the trouble. Most of today's equipment is expensive, too expensive for the average person who is only interested in investigating something or other. Sure, it's great to look at those super-beasties. It is even fun to own one of them. But for



the beginner, they do not make economical sense.

Recently I came across a press release from the people at Unicolor. In addition to their already established line of fine darkroom equipment and chemicals, they have added an enlarger that is truly worthy of examination. And after working with the enlarger for a period of time, I'm convinced that it is one of the best available answers to the problem of getting into darkroom work.

For example, right off the top the suggested list price of \$119.95 makes this a truly outstanding buy in this age of inflated prices. The lens that comes with the unit is a 50mm f/3.5 (with stops down to f/16), which is ideal for the 35mm-format size. And while the lens is not one of the most sophisticated pieces of glass that I've ever used, it performed quite satisfactorily over a wide range of magnifications. In fact, when using the lens at f/5.6 to f/8, I could not tell the difference in results when compared to my standard high-priced enlarging lens. However, if despite the performance of the Unicolor lens you

feel you want or need a "better" lens, the enlarger is threaded with a standard 39mm Leica-type thread, which will accept most enlarging lenses.

Basically, the unit comes in an attractive box that houses the components in a "knocked-down" condition. It is only a matter of minutes to set it up, and it can be "knocked-down" at any time for easy storage. The set-up enlarger stands only some 30 inches high, and the entire unit weighs only five pounds, more or less. Finished in a matte-black surface, the enlarger looks every inch a performer—which it is!

The unit also has a single condenser for brilliant blow-ups and uses a 75-watt No. 211 enlarging bulb or a Unicolor Wide Field Enlarger Bulb. Additionally, it has a filter drawer that accepts three-inch filters for black-and-white enlarging or color printing. I'd suggest starting with black-and-white, though, before plunging into color printing.

Magnification to the baseboard is 10X. But if you need larger prints, the column can be reversed for floor projection. Also, if you need even larger prints, the unit can be adjusted for wall projection, and if you ever blow your top, the unit can even be adjusted for ceiling projection. Whatever your pleasure, the Unicolor enlarger adapts, easily.

The enlarger's negative carrier is of the lift type instead of the kind you have to pull out every time you change a negative frame. Just lift the handle and slide the next negative into place. Then release the lever and you're off printing again.

Make no mistake about this unit. It is low-priced, to be sure, but it is capable of quality enlargements and represents an easy and relatively inexpensive way to get into enlarging your own prints. All you need is a few simple accessories to make your darkroom complete. One of these accessories can be seen on the baseboard of the enlarger in the photo: a Unicolor print drum. With this little handy-dandy device, you can actually process your prints (black-and-white or color) in room light. The other "accessories" include an easel, some black-and-white enlarging paper and some simple chemicals. You supply the negatives.

You really don't have to miss out on the fun of doing your own darkroom work any longer. The price of the Unicolor enlarger is attractive enough to permit anyone to get involved without spending a small fortune. And the results and rewards cannot be measured in terms of dollars. You have to try it to believe it! □

If you've got the instinct for taking fine photographs...



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□ The physical phenomenon of color temperature often provides the answer to why some photos exhibit an off-color rendition of our subjects. All too many of us are familiar with the orangy skin tones of a portrait shot indoors under tungsten lighting with daylight-balanced film. Another perhaps familiar situation is the bilious green version of skin rendered by fluorescent bulbs, or the blue-tinged skin tones offered by a daylight shot on tungsten-balanced film. Our eyes have the ability to adapt to these visual differences but film does not.

Light sources and film must be compatible with regard to color temperature to avoid these unpleasant color shifts. During the manufacture of film the various layers of light-sensitive material are correlated to correspond to the amount of red, blue and green light in either tungsten light or daylight. The film box is marked with that designation. Color films are made in only a limited number of Kelvin readings: 3200°K—tungsten, 3400°K—photoflood, and average daylight—5500°K.

Suppose for a moment that you have only daylight film and you want to shoot perhaps only four or five shots under tungsten lighting. Must those few shots on the whole roll be off-color? Certainly not. Or suppose the nature of your photographic endeavor requires highly accurate work and you want the colors to be absolutely precise—more so than may be allowed by using the three standard, average color-temperature balanced films. Can you do it? Certainly, with the proper tools you can.

The first step is to determine the actual color temperature of the scene you will be shooting—the tool to do this is a color-temperature meter. Once done, the generally accepted method to correct the balance for the type of film is to use filters; and there are two types of filters from which you can choose depending on the amount of change required.

COLOR TEMPERATURE METERS

Minolta 3 Color Meter—The Minolta meter has red, blue and green detectors and reads out in Kelvin degrees, mireds and light-balancing and correction filters directly; it features lux/foot-candle conversion scales on the meter body. It uses blue-enhanced silicon photodiodes and offers an automatically locking needle to hold readings for easy reference. The unit has a color temperature range of 2500° to 12,500°K. It is an incident-reading-type meter and has a built-in battery checker and a zero adjustment screw. The manufacturer's suggested retail price for the

TOOLS OF the TRADE

KAREN SUE GELLER

CONTROLLING COLOR TEMPERATURE

Minolta 3 Color Meter is \$795. It is a product of Minolta Corporation, 101 Williams Drive, Ramsey, New Jersey 07446.

Spectra®TriColor®Meter—This color-temperature meter measures blue, red and green and provides filter information for correct reproduction of any light source—fluorescent, arc, mercury vapor, even mixed ambient sources. It uses silicon photo cells and reads out on two scales, green/red and blue/red. In use the

and to indicate the required filters for any continuous spectral light source such as tungsten or daylight—fluorescent light, you may recall from "Light and Color Temperature" (see "Tools of the Trade," April, 1979 issue), falls outside of this category. A supplementary calculator dial snaps onto the Luna-Pro sbc computer dial. It can be preset at the specific indexes for daylight, Type A or Type B films or any other color temperature value from 2600° to 20,000°K. The unit is switched on, the flat diffuser of the Luna-Color pointed toward the light source, the calculator dial is rotated to null the meter, and the color temperature and required filtration can be read opposite the null mark. Equivalent values of conventional color-compensating (CC) filters are shown on a table on the back of the attachment. This accessory lists for \$199.95 from Berkey Marketing Company, 25-20 Brooklyn-Queens Ex-



1. Minolta 3 Color Meter
2. Spectra TriColor Meter
3. Gossen Luna Pro sbc Meter and Luna-Color Attachment

meter is pointed at the light source, the trigger pressed and then released to lock both needles. The TriColor meter has a color temperature range of 2500° to 30,000°K. Required filters and exposure compensation for correcting color balance are determined by referral to a dial computer card. The meter is supplied with two computer cards and a foam-lined carrying case. Unit has a list price of \$965 and is a product of Photo Research Division of Kollmorgen Corporation, distributed by Simon Associates, 1019 Trillium Lane, Mill Valley, California 94941.

Gossen Luna-Pro/Luna-Color System—Berkey Marketing Company has taken a much different approach with their Gossen light meter system. The Luna-Pro sbc meter can be converted to a color-temperature meter with the Luna-Color attachment. This accessory reprograms the circuitry of the Luna-Pro meter to determine the color temperature of incident light

pressway West, Woodside, New York 11377.

COLOR CONVERSION FILTERS

Color conversion filters are for use when a significant change is required, such as balancing film to a different type of light source. For example, you wish to use daylight film while shooting under tungsten lights. The technical data sheets packed with film generally give conversion filter information.

COLOR-COMPENSATING FILTERS

These filters are intended for less drastic changes. They allow the photographer to make minor adjustments in the light's color quality to give a warmer or cooler rendition such as when shooting through green-tinted glass, where the addition of a CC30R filter will give a warmer cast to the finished photo. The CC stands for color compensating, the 30 represents a .30 density, and R is for red.

If you find yourself in need of more information on the topic of filters for color-temperature correction, Kodak publication No. AB-1, *Filters & Lens Attachments for Black-and-White and Color Pictures*, \$2.25, or Petersen's *Photo Filters*, \$3.95, will be of help. □

Take me along.

FOR AVAILABLE LIGHT.



FOR ELECTRONIC FLASH.



FOR THE UNEXPECTED.



Kodak Ektramax f/1.9 pocket camera

Imagine the pictures you can get with a fast $f/1.9$ lens and ASA 400 film in a camera you can take virtually anywhere.

Here is Kodak's most versatile pocket camera—equal to almost any photo situation, yet small enough to fit in your pocket.

The lens is extraordinary. Wide open and stopped down, it can produce negatives with edge-to-edge sharpness. One reason is this Kodak lens is designed with an aspheric element—a design usually limited to expensive, supplementary lenses.

Newly designed Kodak $f/1.9$, four-element, aspheric lens.



Full-information, sports-type viewfinder.

The viewfinder is little short of amazing in a pocket camera. It's large, bright, and displays 110% of the picture area, which is outlined by a projected reticle with parallax correction.



Viewfinder displays projected reticle with parallax correction—plus exposure and focusing data.

Focusing aids and exposure data are also clearly visible at all times. You can focus and adjust the camera without taking it from your eye.

Built-in electronic flash with 2-second recycling.

The tiny, integral flash has an effective range of 20 feet with ASA 400 film. It recycles in an astonishingly brief 2 seconds with fresh batteries.

Check it out at your dealer's.

In many ways, this "Can-Do" camera from Kodak is a joy to handle. The shutter release is firm and precise. The smoothly operating focus wheel fits nicely under your fingertip. And there's a sliding lens/viewfinder cover you can't misplace.

There's also a price that's surprisingly small for so much camera: less than \$92. at your photo dealer's.*



A NEW GENERATION

Introducing the Canon AV-1.
The New Generation continues.



BASIC ECONOMICS

One of the basic laws of economics is the law of Supply and Demand. And it's because of this law that a new Canon "A" Series SLR has been created. The Canon AV-1.

The AV-1 represents Canon's desire to offer the quality of Canon electronic SLR design in a package of maximum value and simplicity. To accomplish this, we took experience gained through the creation of our other electronic "A" Series cameras and produced an aperture-priority automatic exposure camera of Canon quality at a price that's a revelation. And the reason the price is low is due to the AV-1's aperture-priority exposure system. It costs less to make than shutter-priority. And you reap the rewards of this cost savings where it matters most...your budget.

automatic SLR of the electronic age of photography.

WHAT IT DOES

The operation of the Canon AV-1 is electronic photography with SLR versatility at its most straightforward level. It works in simple aperture-priority fashion: you pick the aperture you want, the AV-1 selects the proper shutter speed for perfect exposures

flash other than the Canon Speedlites 155A and 199A. Speeds are stepless, for superb accuracy, and a new technological advance in shutter design permits increased simplicity and a *genuine* increase in efficiency as well.

The viewfinder is simple, complete and highly functional, showing the speed selected by

THE "A" SYSTEM

As part of the Canon "A" Series of cameras, the AV-1 uses the Power Winder A for sequences (up to 2fps above 1/60 sec.) and single motorized advance at any speed. Plus both



the Speedlite 155A and 199A for exceptionally easy automatic electronic flash photography. Each unit sets the AV-1's shutter speed to the correct 1/60 sec. for flash synchronization, while the user selects the proper auto flash aperture using the unit's calculator dial. As with the A-1 and AE-1, should you shoot before the ready light is on, the AV-1 reverts to the normal auto exposure mode. It's almost impossible to make an exposure mistake. And,



like all the "A" Series cameras and other Canon SLR's the AV-1 will give you options on more than forty of the finest lenses in 35mm photography plus an almost limitless list of accessories for practically every conceivable photographic application. And since the AV-1 is an aperture-priority automatic camera, you can use stopped-down automation with all non-FD Canon lenses and accessories.



THE IDEA

The AV-1 is really the logical extension of the AE-1 rationale. It is, frankly, our answer to some competitors who are making cameras of the AV-1's general configuration...but are asking what amount to AE-1 prices for somewhat less technological sophistication and performance than the AE-1 has to offer. Canon's goal with the AV-1 is to make quality SLR photography more economical and simpler.

Check out the AV-1 soon. You'll see we've succeeded.



It's no secret that when we introduced our New Generation AE-1 three years ago, it really *did* mark the beginning of a whole new generation of photography. Not just in terms of technology, but in terms of value and people. Involving a spectrum of photographers that was unique in its breadth, from absolute novices to seasoned professionals. Spawning a virtual ocean of imitators, the AE-1 quickly became the most asked-for camera of its type anywhere. And, three years later, it still is.



Our competitors responded to the AE-1 with aperture-priority automatic cameras considerably simpler...but in the same general price range. We think that, for most applications, shutter-priority automation is superior. And we think that you shouldn't pay shutter-priority prices for aperture-priority design. And so, we made the AV-1. It is, in effect, the camera for everyman. The *basic*

in almost any light. Like other "A" Series Canon SLR's, the AV-1's metering sensitivity is center weighted, for optimum exposures in a wide range of lighting situations. For additional control in backlit situations, there is a button for +1.5 f-stops exposure compensation, realized in a 1.5-step drop in shutter speed.

Shutter speeds on the AV-1 range from 2 to 1/1,000 sec., plus "B" and a manual speed of 1/60 sec. for use with electronic

the camera's CPU computer, over- and underexposure warning marks, slow shutter speed warning/battery check mark and split-image/microprism/matte focusing system.

Outside, controls have been simplified and enlarged for superior right-hand operation with virtually no chance of "control confusion." All operational characteristics are in keeping with the AV-1's design philosophy of peerless performance with near-total simplicity.



THE OFFICIAL
35MM CAMERA OF
THE 1980 OLYMPIC
WINTER GAMES

Canon AV-1

A NEW GENERATION

Six-mode exposure control.
System versatility.
Newer electronics for wider applications.



Canon A-1

USING THE A-1



The new Canon A-1 is more than just the most advanced single-lens reflex camera in history. More than a technological curiosity. It's a system approach within a single camera. An unmatched vehicle for the solution of the most complex photographic problems with a truly remarkable simplicity in almost any case. And the heart of the A-1 is its six-mode exposure flexibility. That puts an end forever to arguments about which expo-

sure mode is best in an automatic SLR by simply giving you everything.

1 Shutter-priority automation lets you select the speed you want to freeze action, prevent camera motion or purposely blur for dramatic impact. The A-1 selects the proper aperture in milliseconds.

2 Aperture-priority automation gives you total control over depth-of-field or lets you pick the aperture you prefer best. The A-1's shutter adjusts steplessly to give perfect exposure in any light.

3 Programmed automation is the A-1's unique all-purpose automation mode. It's great for shooting from the hip, adjusting aperture and shutter both over the camera's entire sensitivity range. And in an unmanned application it will continue to give correct exposures even when the lens' maximum aperture has been reached by adjusting for the correct shutter speed.

4 Stopped-down aperture priority makes the A-1 a truly universal camera, giving aperture-priority automatic exposures with anything you can mount on the camera—tele-

scopes, microscopes, pre-set lenses, bellows and extension tubes. Anything.

5 Flash automation with the A-1 is absolutely the simplest anywhere. With either the Speedlite 199A or 155A all you do is mount the unit and turn it on. When the ready light is on (shown in the viewfinder) your aperture and shutter speed are automatically correct. If you shoot before the flash recycles, the A-1 reverts to regular auto exposure.

6 Manual exposure is just what the name implies. You set aperture and shutter speed for studio flash, special jobs or unusual applications—if there are any you can find that the first five exposure modes won't cover.



Aperture priority shows pre-set aperture

Shutter priority shows pre-set speed

But the A-1's spectacular exposure control is only the beginning. Inside, all information is handled in digital form. Which means it handles a greater amount of information (that's why it has such exposure capability) as well as giving you a totally digital LED readout in the finder. A readout that's invisible until you turn it on and can even be shut off—while still letting the A-1 operate automatically. A readout that gives you a 7-LED display and tells you everything the A-1's doing. Changing every 1/2-second as the light changes. And varying in illumination inten-

sity as the light varies. There's never been anything like it.

There's never been a camera that's handled like the A-1, either. All exposure functions can be controlled by the single AT dial, which locks to prevent errors. Different exposure modes are shown by symbol and color code, and only the appropriate scales are visible in each mode.

Exposure can be corrected as much as ± 2 stops in 1/3 stop increments and an exposure lock helps with really difficult lighting situations.

There's also a two-speed self timer, easy multiple exposures and a host of other control features that are a pure delight to use. With the new Motor Drive MA's smoothness and versatility (up to 5fps with Battery Pack MA) the A-1 is ready to handle any photographic challenge.

Whether you want to use the A-1 as a focus and shoot automatic SLR or explore the technological miracles it can perform, one thing is certain. You won't find anything like it anywhere for a long, long time.



The first computerized, shutter-priority automatic SLR. It changed the course of fine photography

USING THE AE-1



This is the one that started it all. A veritable flood of imitators.

Yet the performance and cost efficiency that has made the AE-1 the number one selling camera of its type in the world are still at work helping make it the most sought-after camera anywhere.

In your hands the AE-1 is a compact marvel of thoughtful engineering with the security and ease of shutter-priority automation. Most photographers agree that this type of automa-



Canon AE-1

tion is best for most photographers under most situations. The reason we could put it into the AE-1 comes down to foresight on the part of our FD lens designers. When you have the right lens mount, you don't have to build aperture-priority automation into your cameras. But that's another story.



The AE-1 is a model of direct, uncluttered photographic operation. Shutter speeds fall under your right index finger and apertures selected are clearly visible in the bright, easy-to-focus viewfinder. You can preview your exposure either with the shutter button or a special switch that falls under your left thumb. Just above this switch is a +1.5 stop exposure correction button that's just perfect for typical backlit situations.

Used with either the Speedlite 155A or new 199A, the AE-1 is the most automatic flash SLR ever. When the units' ready lights are on, your shutter speed is set to 1/60 sec. (no matter what the dial is actually set on) and your aperture is automatically set to the proper exposure for the distance range selected. All you do is mount the unit, switch it on and you're ready for perfect flash exposures. And if you shoot before the ready light is on, the AE-1 will make a correctly

exposed image in the normal auto exposure mode.

The AE-1's automatic operation is enhanced even further by the operation of the optional Power Winder A—a simple auto winder that can shoot single frames or sequences as fast as 2fps at speeds above 1/60 sec. The reason that the Power Winder is so simple—read reliable—is that most of the brains for its operation are in the electronics of the camera.

With the AE-1's removable back, you have the option of using the exclusive Databack A. This accessory is invaluable for recording data or dates in a wide variety of three-digit combinations as you shoot. A choice of three light intensities is available to match the sensitivity of the film in use for perfect imprinting control in any situation.

If compact, automatic, state-of-the-art electronic performance at an almost incredible price is what you're looking for, you'll find it in the AE-1.



Match-needle metering with electronic flexibility. Conventional photography redefined.



Canon AT-1

USING THE AT-1



If you remember when through-the-lens metering shook the photographic world, you'll love the AT-1. It's the classic through-the-lens match-needle metering camera with a twist. Because it shares the technology of the "A" Series of Canon SLR's, it has up-to-the-minute performance features that bring this traditional photographic format into the present with a bang.



In use it's almost as simple as the AE-1, with a bright viewfinder and fast, accurate needle centering. And it shares the "A" Series' compactness, great handling and light weight. But what's really exciting about the AT-1 is its access to the great "A" Series of Canon accessories.

With the AT-1 you get to use the Power Winder A for singles

or sequences and both Canon Speedlites, the 155A and 199A. On the AT-1, they set the speed automatically, you set the aperture. And the Databack A gives you date/data recording at the press of the shutter, interchanging with the camera back with a simple press of a button.

Of course, the AT-1 uses all FD series Canon lenses for auto-aperture, full aperture match-needle metering and many older Canon FL series lenses for stopped-down match-needle metering with full aperture automation. All with center-weighted meter sensitivity for top exposure accuracy with the widest variety of subjects.

If match-needle metering is the way you like your photography—but you don't want to sacrifice modern performance—the AT-1 is just what you need.



CANON "A" SERIES ACCESSORIES

The Canon "A" Series of accessories for Canon "A" Series cameras is more complete, more interchangeable, more economical and more dependable. Because all Canon "A" Series cameras share similar electronic technology, there's greater flexibility in the system. One Winder will fit all the cameras. The same for the auto flash units. It makes more sense. And it makes the Canon "A" Series a better buy.



Interchangeable Lenses
Canon lenses, from Fish Eye to Super-Telephoto are a perfect match for any "A" Series Canon SLR.

Speedlite 199A

Automatic flash sets aperture and speed on the A-1 and AE-1; speed on the AT-1 and AV-1.



Speedlite 155A

Automatic flash sets aperture and speed on the A-1 and AE-1; speed on the AT-1 and AV-1.



A-1



AE-1



AT-1



AV-1



Motor Drive MA

Battery Pack MA

NiCd Pack MA



Power Winder A

The perfect motorized film advance. For single shots or sequences at up to 2fps with any "A" Series camera.



Databack A

Interchanges with the back on the A-1, AE-1 and AT-1 cameras. Records date/data as you shoot.

Motor Drive MA

The heart of the A-1's fabulous new motor. Compact, rugged. Professionally competent.

Battery Pack MA

For an incredible 5fps top speed with the Motor Drive MA Basic Unit. Plus unique "instant high speed" switch for 5fps from any other mode.

NiCd Pack MA

Rechargeable, compact and light weight. The ideal replenishable power source for the Motor Drive MA.

Camera	Auto Exposure	Match-needle Exposure	Application
A-1	yes	no	General automatic photography and sophisticated problem solving
AE-1	yes	no	general automatic photography
AT-1	no	yes	general photography
AV-1	yes	no	primarily automatic photography



THE OFFICIAL
35MM CAMERA OF
THE 1980 OLYMPIC
WINTER GAMES

Canon[®]

☐ There are three ways to have your book published:

1. *Contact a reputable publishing house* big or small and get them sufficiently interested in what you have to say or show that they will provide you an advance and set up a royalty agreement. I won't dwell on this particular aspect since I covered it in detail in the last two columns. However, I will add that this approach is the most popular, safest and most widely used among authors and illustrators, for you have an absolute guarantee of a cash advance plus royalties, depending upon book sales.

2. *Self-publishing*—This requires contacting a printer who must do all the typesetting, photo engravings, illustrations, diagrams, etc., in addition to cutting paper stock to size and binding the book after printing. All of this will cost thousands of dollars and more if there is any color involved; if the printer has to do any proofreading; or if he is in any way involved in making the book *print-ready*—involved in layout, continuity, or determining the amount of books to be printed. Costs will further soar if you require a dust jacket for your book.

To beat the excessive price of such a project you might try to make a deal whereby the printer shares in the proceeds of the sales of the book—an unlikely event unless the printer is thoroughly convinced that the book has definite sales potential. Were this to take place, the arrangements would vary depending upon whether you and the printer put up a like amount toward the actual printing, paper stock and distribution costs. If you ante up more than the printer, then he reaps a smaller share. If you pay for the whole kit and kaboodle, then you own the book outright. But then there is the matter of coast-to-coast distribution and promotion, which is difficult to obtain. In this last respect, I am talking about an initial trial printing run of at least 5000 copies. Anything less wouldn't be worthwhile unless you only distribute regionally or you can afford the ego trip of *having your very own book published!*

I'm not discounting an author-printer relationship, but I must repeat that it will be quite costly, not only for the actual printing, but for the extremely important distribution process, which gets your books into bookstores nationwide. Receiving a return on your investment will be a slow process if there is any return to be had. It will be even slower if you go the mail order route and handle everything yourself—packaging, ship-

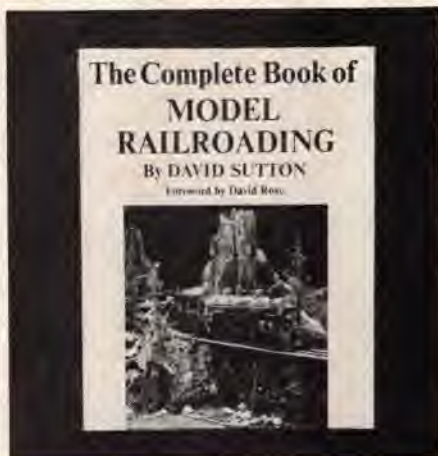
WHERE the ACTION IS

DAVID SUTTON

PUBLISHING A BOOK

ping, advertising, etc. Also consider that a distributor will cut down on your proceeds by way of taking a share of the sales or a discount per book. The book will then be marked up prior to release and sale to the bookstores, which will then add their own markup and sell the book at a retail price. Yet, if your book proves successful, you will have a solid piece of the action.

3. *Vanity publishers*—On the surface these publishers are just like



This book was published under the best of circumstances by Prentice-Hall, Inc. I received a good advance and over the years my royalties have been very acceptable. If you publish a book, do it right! © David Sutton

any other publishing houses. They publish books of all sizes, description and subject matter, but at a price, and a very hefty price at that. You've seen their ads, which read something like this:

Attention! Writers & Illustrators!

We need manuscripts and illustrations!

We will publish YOUR book!

Our representative will be in your city next week.

(They name the hotel, room and phone number)

Call for an appointment!

Now is your chance to become a published author!

Don't wait! A limited offer!

Sounds great doesn't it? Not so great for a woman who paid \$5000 to publish a small book of poems. Another woman paid a like amount for a book about her dog. One man parted with \$10,000 to have his novel published. Sound questionable? Absolutely, since only on the rarest of

occasions do any of these books appear in the book stalls. Why? Because most distributors avoid vanity-published books. These books often suffer from lack of exposure, promotion and advertising, and in most cases are just run-of-the-mill in content. In short, vanity publishing is a come-on offering nothing more than the physical publishing of books, usually at prohibitive prices.

Earlier this year the topic of vanity publishers was well-documented on the nationally televised show *60 Minutes*, aired by CBS. During several interviews with authors who felt they had been bilked and vanity publishers who denied it, it was revealed that less than 25 percent of the vanity books ever manage to get into a bookstore, let alone provide any royalties. In addition, one writer complained that he had 500 copies of his book (the extent of publication) stored in his garage. In consensus the vanity publishers replied (and I paraphrase), "These people want to have their own books published. We do that for them, but we don't guarantee anything else beyond that."

If you can afford it and/or have such an ego that you are willing to spend thousands of dollars to have your book just lie around on your cocktail table or distributed among relatives and friends, then go ahead, *it's your vanity!* If not, steer clear of vanity publishers!

So much for book publishing for the moment. Permit me to move along to some final tricks of the trade concerning book contracts and how you should amend them before signing on the dotted line. Two additional codicils come to mind. One involves the fact that after so many years the publisher has the option to destroy all plates, paper stock, etc., unless you elect to purchase them, generally at 50 percent of the cost. After the purchase you can then self-publish or arrange with another publishing house to print and continue publication. If your book has done well, by all means do so.

Another item concerns the publisher's request to have the option to publish your next work. You should add: "under terms to be arranged," plus the addendum: "It is agreed that any work of less than 25,000 words shall not be considered a competing work." In other words, you will be allowed to offer another or abridged version in hard or soft cover without violating your contract.

The book publishing field is a fascinating, sometimes lucrative endeavor. But remember it requires an enormous amount of work, planning and thinking. See you next month! □

☐ Sooner or later in the life of every photographer comes the desire to branch out—to share problems and solutions with others in the same field, to add fuel to the creative fire by having new experiences, to become a member of the photographic community.

One way to keep up with current events in photography and expand your knowledge is to attend photographic seminars, classes, workshops and lectures in your area. Many groups conduct photo tours to all parts of the world; these tours usually emphasize photo instruction. Club members who take part in these activities are in the unique position of going home and sharing new information with their comrades, increasing the benefit of the experience many times over. For those interested in learning about the variety of events and activities taking place this year, we have included the "1979 Seminars & Workshops Calendar" in this issue, beginning on page 89.

There is another source of information on photographic events you should be aware of: *Gadney's Guide to 1800 International Contests, Festivals & Grants in Film & Video, Photography, TV-Radio Broadcasting, Writing, Poetry, Playwriting & Journalism*. Author Alan Gadney spent over three years compiling the 1888 listings of art and media events, which are organized into six "media divisions" or chapters as enumerated in the book's title. Each chapter is further divided into "special interest" subcategories.

Two general types of events have been included in the book: 1) those national and international contests, festivals, competitions, salons, exhibitions, markets, trade fairs, and various award/sales events to which an entrant may submit his or her work in order to receive something of value in return; and 2) grants, loans, scholarships, fellowships, residencies, apprenticeships, internships, training programs, etc., to which an individual or organization may apply for some type of aid or benefit.

Each event listing consists of the event's name and a current address; month/season held; an introductory paragraph including entry restrictions, purpose, theme, motto, sponsors, recent statistics, historical information, and other aspects; technical entry regulations; eligibility requirements, entry fees, awards; judging aspects and catch clauses; and deadlines. The book's introduction provides in detail such valuable information as how to analyze an event; ins and outs of grant solicitation, and how to enter your work so that you

CLUB CLOSE-UPS ELISSA ROSELLINO

BRANCHING OUT

have the best chance for success.

Gadney's Guide is priced at \$15.95 softbound and \$19.95 hardbound; write Festival Publications, P.O. Box 10180, Glendale, California 91209.

When you've chosen the competitions to which you'd like to submit your work, supported it securely between heavy cardboard sheets and sealed the package up tight, the next thing you're likely to encounter is the bewildering array of postal regulations and types of insurance avail-



Each week hundreds of people submit their work to PhotoGraphic. The smart ones arrange for a return receipt of delivery. See text to find out how it's done.

able. A resourceful reader, Ryan Leverkus, delved deeply into the problem, her research taking her to the Los Angeles Customer Relations Department of the U.S. Post Office and the Postal Manual itself; she provided the information that follows:

"A package of slides is considered merchandise. If it weighs 15.99 ounces or less, it constitutes third-class mail; 16 ounces or more qualifies it as fourth-class, also called parcel post. Both third- and fourth-class mail may be sent as insured first-class mail if the envelope bears the notation 'Third-class mail enclosed' or 'Fourth-class mail enclosed.' However, if you choose to send your photographic 'merchandise' as regular first-class mail, you cannot insure it for more than \$400. Furthermore, you will be able to collect the declared value only if you can prove it is actually worth that dollar amount."

If a claim arises, you must first prove the package was insured (so hold onto your insurance receipt) and then submit evidence of value, such as sales receipts, invoices, a statement of value from the prospective buyer, catalog value of similar articles; or a comprehensive statement describing the items lost, price of materials used, labor estimates and modeling fees. Unfortunately, the

U.S. Post Office will not pay on claims of "loss, rifling, or damage" to material offered for sale to prospective buyers who have not authorized their sending.

"Happily," Ms. Leverkus assures, "there is an option that will satisfy you whether or not you can justifiably assign a value to your parcel. You can register it. By paying a first-class postage fee plus a base rate, which is currently \$3, you can buy your package special handling and automatic insurance of up to \$100. For an additional fee you can purchase virtually any amount of extra insurance. Of course, the inevitable proof-of-value will be required should you eventually have to file a claim. But virtually from the time it leaves your hands, your parcel is under lock and key. As it passes from station to station, carriers must sign it in and out. It *must* be fully accounted for at all times.

"Packaging requirements are more stringent for registered items. 'Jiffy bags' (padded envelopes) are *not* acceptable. A plain 8x10 manila envelope will suffice if you use corrugated cardboard inserts and seal it across the end flap with wide brown paper tape." Cellophane tape is not acceptable for registered mail because ink from the stamps will smear on it.

Purchasing a return receipt of delivery for a small additional amount when you mail the package will not only make the package much easier to trace if the addressee claims it was not received, but it will add to your peace of mind as well because the receipt will come back to you bearing the date the package reached its destination. Certified mail can provide the same return-receipt service as registered mail—and is considerably less expensive—but you cannot obtain insurance with it or the same degree of special handling.

When you finally decide to send your work out into the world, make sure it's properly packaged and provided for. And you might want to look into some of the sources of information on photographic events available to you now, so you'll be ready to go when the time comes to branch out. □

Camera clubs please note: "Contest News" can be found on page 101.

Join a Camera Club: Just send a self-addressed, stamped envelope along with a list of nearby zip codes to Camera Club Editor, c/o Petersen's PhotoGraphic Magazine, 8490 Sunset Blvd., Los Angeles, California 90069.

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Specifications: 75-150 mm f3.8 close focus. Optical Construction: 12 elements, 9 groups. Angle of View: 18°-32°. Minimum Focusing Distance: 80 cm. Minimum Aperture: f22. Filter Size: 52 mm. Maximum Diameter: 63.5 mm. Overall Length:

99.5 mm. Weight: 420 g. Tokina Multicoating.

Specifications: 80-200 mm f4.5 close focus. Optical Construction: 12 elements, 9 groups. Angle of View: 12°-30°. Minimum Focusing Distance: 60 cm. Minimum Aperture: f22. Filter Size: 52 mm. Maximum Diameter: 63.5 mm. Overall Length: 124 mm. Weight: 470 g. Tokina Multicoating.

Both lenses available to fit following mounts: Pentax S, Pentax K, Minolta SR/MD, Nikon AI, Canon, Olympus, Fujica, Yashica, Konica. Distributed by:

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The 75-150mm and 80-200mm as shown actual size.

☐ Verde que te quiero verde, verde viento, verdes ramas.

—Lorca

Perhaps the most extraordinary light of the year in New England begins with the rains of late April and extends only midway through the merry month of May. The buds erupt in tender but irrepressible explosions, a pale and powdery green that spins in the wind. The light that filters down upon human faces is cool and soft, but surgically precise in its delineation of detail. And what happy faces they are—nostrils filled with the fragrance of new life, skin drinking the moisture-heavy air. Winter is gone; it is the end of the big sleep. Afterimages of dandelions sail through clenched eyelids like blue ghosts. If it were only possible to bring them back from the past, I would photograph every human being I've ever loved in this light.

"Quality in work is prerequisite to quality of expressiveness," said Paul Strand, who had no truck with fancy lighting setups or small-format cameras. A master at portraiture, Strand worked outdoors in soft indirect lighting using 8x10 and 5x7 cameras. Storms delighted him. He loved to photograph just before a cloudburst. Whether he printed on platinum or silver, his prints reflected the tremendous respect he had for the people he photographed. He was, of course, one of the truly fine craftsmen in the history of the medium. If it took several days to make a print to his liking, he'd take several days. In a Strand print the highlights are luxuriant, the shadows open and rich in detail. They have the quality that he valued so highly in his subjects: dignity. They radiate always a quiet strength, and sometimes a glimmer of hope that the photographer himself wanted so desperately to feel. "The difference between my photographs and Stieglitz's," said Strand, "is that he has hope and I have none." This haunting aspect of melancholy is also apparent in many of his portraits.

Paul Strand is among the handful of photographers whose work really reaches me on a gut level. One trusts Paul Strand; his concern was for his subjects. For Strand the "decisive moment" was not the lightning-fast recognition of chance juxtapositions of forms within a camera frame. Rather, it was the moment of synthesis between the photographer and his subject, whether it took minutes or years in coming. It was the intensity of that moment of insight that fueled his artistic efforts.

SILVER DREAMS

JOE NOVAK

THE PORTRAIT: ASPECTS OF STYLE

What is important to me about Paul Strand is not his preferred lighting, nor is it his choice of camera, although there are excellent reasons to support his technique. It is his intensity, his caring, his obsession with excellence that is so admirable. If you can develop those qualities, you can make beautiful portraits with a box camera or even a camera loaded with the peel-apart stuff Polaroid sells. Bill Brandt and Marie Cosindas are testimony to that.



This is a 35mm portrait of Ed Barna, a Vermont poet and farmer, cradling his dying cat. Ed is a writer of considerable insight and sensitivity, and may well become a social essayist of note in the '80's. Kodak Tri-X Film and a gentle developer combined to tame the slightly harsh summer light.

I'll toast Ms. Cosindas lightly by mentioning here that the inimitable Tom Wolfe has compared her to a microwave oven in the introduction to her own lavishly produced book. The electric eclectic Wolfe uses the microwave metaphor to convey her intensity during his first portrait sitting with her. It seems that she immediately demanded that he change his clothes. That was probably a first for him. Tom's essay on Cosindas and photography is well done. Next time you're browsing in the photography section of your local bookstore, with or without \$45 in your pocket, give it a scan. It's published by the New York Graphic Society Of Boston (try to figure that one out) and contains 60 beautiful color plates. The book is entitled, simply, *Marie Cosindas—Color Photographs*.

Old Polacolor never dies, nor does it even seem to fade away. Most of Cosindas' portraits are exquisitely lovely, their subjects as luminous and as brittle as handpainted Chinese ceramics. Or as strong and vivid as painted horses on an antique carou-

sel. Tom Wolfe is portrayed in a series called "The Dandies," throbbing softly in a white suit and shoes, blue socks, blue necktie and blue pocket handkerchief. It's nice to look at, but I can't help but feel that it's a better portrait of a suit than of a writer. More stark and raving is a portrait of Andy Warhol on the following page, poised seemingly at the edge of catatonia on a fire escape. This photograph is very effective in conveying to the viewer some essence of Andy Warhol's spirit.

The joy of Marie Cosindas' portraits is in the pure sensuousness of their tonality, in the peculiar beauty of the one-of-a-kind instant print. Ms. Cosindas' fine sense of craft has enabled her to exploit these qualities to the fullest. The images appear precious and lush. I must admit that her still-life work bores me silly—a curious circumstance, since her portraits and still-lives are so remarkably similar that I sometimes wonder if she knows the difference.

Because her subjects retain their expressiveness and individuality, Cosindas' style, however imposing, commands respect. Ideally, a photographic style ought to serve both the photographer and the subject. Rarely does it serve the subject alone, and all too often it serves only the photographer. I'd place David Hamilton's style in this latter category. In two or three or half a dozen portraits, the melancholy teen angel survives intact. Multiplied a thousandfold, she becomes one of a long procession of wistful blue-eyed robots gazing into space from grainy beaches, grainy bedrooms, beneath grainy arches, up against grainy walls. It hardly seems necessary for the girls' parents to sign model releases. Hamilton's technique virtually guarantees the girls complete anonymity. The easiest point for a photographer to make is the point of tedium. David Hamilton has arrived.

In examining the work of these photographers, it is readily apparent how the technical characteristics of their chosen media strongly affect the emotional impact of their portraits. But we also see that the most important difference is the degree to which the photographer preconceives his or her subject. Ask yourself what motivated the photographer to make the photograph. "Above all, look to the things around you, the immediate world around you," said Paul Strand. "If you are alive, it will mean something to you, and if you know how to use it, you will want to photograph that meaningfulness." □

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OLYMPUS OM-10

Photographers and filmmakers who plan to take to the hills or the hinterlands this summer will have more than camera equipment considerations to take into account before setting out. Once the camera and all its accouterments are gathered together, cleaned and put in good working order, you're going to need a manageable solution to the problems of storage and transportation.

The how-to-carry-it dilemma is a familiar one for active photographers. Whether the trip you're planning is a backpacking and rock-climbing expedition, a cross-country ski outing, a Colorado River raft tour, or a flight or drive to a distant city to visit friends and relatives, you're going to need a way to tote cameras, lenses and accessories. The real hassles often start the night before departure.

How's all that gear ever going to be crammed into the old familiar leather or vinyl gadget bag? Will the canvas pouch you bought five years ago begin to rip in the corners, tear at the seams or suddenly lose a strap when you're 20 miles from nowhere and even three well-placed safety pins just won't bear the weight? Could your backpack or duffle bag handle the load, and if so, will you be so busy pulling lenses out of socks and underwear that exposing film threatens to become more effort than the shots are worth? Even if everything does fit into a durable aluminum case, could you manage to truck your weighty apparatus to a local park, let alone haul it across the Adirondacks in such a cumbersome container? Arnold Schwarzeneggers aside, it's not likely.

Photojournalist Robert L. Weinreb never quite resigned himself to makeshift camera bags and unwieldy cases. Weinreb's assignments for *Gourmet*, *Horizon*, Random House and Workman Press frequently take him to far-off locations around the globe. But it was in the Himalayan Mountains that the professional photographer realized he'd have to design his own bag.

"I wanted a camera bag that would help me work," he says. "My equipment must be instantly accessible, arranged as I need it, and protected in padded compartments. I also need to work with it on my shoulder, so I wanted it light, with the strap properly angled, and of course, I demanded that it be dependable." The Tenba Pro-Pack does all this and more. It clearly stands out from all the other bags on the market for two reasons—its complete adaptability to a photographer's personal needs, and its rugged, lightweight construction. And filmmakers will find that few, if any,

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bag manufacturers make a product that's as appropriate for lugging movie equipment.

Weinreb's Pro-Pack is made from a heavy-duty, extremely water-repellent-coated Cordura nylon, which gives three times the strength and durability of canvas at half the weight. Through a system of Velcro-attached dividers, compartments of various sizes can be created within the bag. The interior is lined with two bands of Velcro loop tape, as are the sides



Here's one combination. I tucked an Elmo 110 super 8, a Nikon 35mm and a couple of extra lenses into the small Tenba Pro-Pack for a trip to Puerto Vallarta this spring. There was plenty of room left over for several cartridges of movie film, six rolls of still film and many miscellaneous supplies. Best of all, everything was organized, accessible and easily carried.

of the long mid-divider. The ends of the side-dividers and mid-divider can be easily and securely attached to these bands, since each divider has two tabs of special-strength Velcro hoop tape. The attachment strength of one end of a side-divider is 12 pounds; a mid-divider is 48 pounds.

"I performed a practical test by placing my motorized Nikon F at one end of an empty bag, walling it off tightly with a mid-divider and a side-divider. I closed the top tightly and shook vigorously. Nothing pulled loose," Weinreb explains. We performed the same test, and he's right.

The next step was for Weinreb to stuff the bag with equipment and take it on his next assignment. He returned to the Himalayas to photograph a corporation's annual report, this time with his newly designed Tenba Pro-Pack. Besides being a professional photographer, Weinreb is also an expert mountain climber. He put the prototype bag through its paces. Not only could the Pro-pack hold a wide variety of equipment, but

it offered good protection for the thousands of dollars worth of lenses, light meters and cameras some photographers must carry. More important, Weinreb was able to shoot with the bag slung over his shoulder and still have complete access to all his equipment.

Pro-Packs come in two basic sizes: 12 x 6 x 7 inches and 16 x 6 x 7 inches, each with a choice of two different tops. While these are not the largest bags made, they have ample carrying capacity. Either model can easily transport a medium-size movie camera such as the Braun 550 XL, boom mike, six or eight film cartridges, a small Lowell light, extra batteries, a can of Dust-Off, a portable cassette tape recorder, reporter's notebook and myriad filters, gels, lens tissues, pencils, pens and miscellaneous supplies.

The packs are lined with a completely waterproof foam so light that it's used for life jackets and kickboards, and so tough and absorbent that it's the latest in lining for football players' and race car drivers' helmets. The main compartment of each pack has a lined, padded wood bottom which is removable for flat packing within a hard case. Along with the Tenba Pro-Packs there are five variations of the Tenba Tri-Pack, a tripod bag designed from the same rugged materials. The cloth used for all Tenba bags is standard mountaineering-pack quality, and the carrying straps for each have a test strength of 6000 pounds. Carrying straps go completely around the bags to safely support tremendous weight and strain.

For those who want to carry the Pro-Pack as a backpack, a harness can be rigged up out of two Tenba camera straps by attaching each strap from the Pro-Pack's D-ring to the carrying strap slide in the center position.

"Tenba" is a Tibetan word meaning strong, unshakable, reliable. "Twenty years of backpacking and mountain climbing have given me great insight into what holds up and what doesn't and how things should be built so they will last and work well," Weinreb says. "The materials used here are the finest available."

Ranging in price from about \$30 for the smallest Tri-Pack to \$105 to \$150 for a Pro-Pack, these bags aren't cheap. But neither is your equipment. Tenba packs were shipped to camera stores around the country this spring, but photographers who can't find them locally can write directly to Robert Weinreb at Tenba, 510 Broadway, New York, New York 10012. □

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□ My brother just returned from a trip to the Far East. Exotic lands, exciting places, fascinating people and fantastic pictures! It all should make for a great slide show. There's only one problem. He's lost. Not there, but here—looking at his slides. Bangkok, Bali, Jakarta, Macao ... three weeks later and they all look alike. Especially the countryside. He's got 52 boxes of slides and he can't sort them out! So here's tip number one:

1. *Use the first shot of each roll for identification.* In this system each roll you shoot is sequentially numbered, and the first shot on each roll is used to record that number. That way, the number becomes an integral part of the film and can't be lost. Simply write the number down on the page of a small pocket pad and shoot it. The pad is incorporated in our next tip.

2. *Carry a small pocket notebook and jot down information about the subject and location of each shot.* The information doesn't have to be lengthy or overly detailed. For instance, typical entries might read: "Roll No. 1, shots 2-22—Bangkok; 23-36—countryside, Bangkok to Chiang Mai. Roll No. 2, shots 2-8—Singapore airport; 9-17—airport to hotel; 18-36—Singapore street scenes." The notes and the time spent jotting them down are minimal, but they can save hours of frustration later when you're preparing your slide show. Now, let's get to the shooting.

3. *Have your camera ready to shoot instantly.* Great shots can be lost because the action is over and done with by the time the photographer is ready to shoot it. So follow the procedure used by professional photojournalists and have your camera ready to shoot at all times. Set up an exposure combination that's correct for the prevailing light conditions and set the camera's focus at the hyperfocal distance (see your camera manual) for maximum depth of field. You can now shoot instantly without having to make any camera adjustments. Then, if there's time, you can be more precise about focusing and exposure for the follow-up shot that will add interest to the sequence. That first shot may not be perfect, but it's better than missing the action completely.

4. *Get lots of "people" shots.* The essence of a country is its people as well as its monuments and cathedrals. Famous structures help to establish locale, but a few such shots are more than enough. The people of

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BEN HELPRIN

TEN TIPS FOR TRAVEL PICS

a country provide the human interest that's vital to any picture series or slide show. Your people shots should outnumber monument shots by at least five to one. If not, you're going to have a hard time maintaining a viewer's interest.

5. *Move in close.* You'll usually need one or two wide shots to establish the locale—but after that, move in. Close framing emphasizes the



A careful compositional placement that counteracts our natural tendency to center the subject matter can also be used to gain pictorial excitement in shots of seemingly dull picture situations. Proper subject placement and other ways of obtaining better travel shots are detailed in this column. Photo by John Sanford.

subject and eliminates extraneous detail. Furthermore, adding variety to your picture-taking distance adds variety to your shots and helps keep slide shows from becoming boring.

6. *Move in even closer.* Fine detail shots add interest to any picture series. For instance, you've taken an overall view of a quaint street. Then you move in for a closer look at a native jewelry stall and, perhaps, a portrait of the vendor. Now finish the series with a few very close detail shots of the handcrafted jewelry. A macro lens, though perfect for such work, is by no means a necessity. A simple and inexpensive screw-on close-up lens works quite nicely and takes up no more room in your gadget bag than an ordinary filter.

7. *Vary the picture-taking angle.* Avoid taking all your shots from a head-on, eye-level viewpoint. Walk around and see if a side view provides a better shot. Also remember that high, "bird's-eye" and low, "worm's-eye" camera angles can produce exciting shots from other-

wise dull picture situations. Radical angles shouldn't be overused, but a few of them will add some interesting variety to your slide show.

8. *Don't bull's-eye the subject matter.* Most of us have a natural tendency to put a subject smack in the middle of the frame. Compositionally, this bull's-eye placement can lead to a dull photograph because centrally placed subject matter usually appears to be in static, rather than dynamic, balance. To avoid the problem, it may help to remember the "rule of thirds." Two imaginary lines are used to divide the frame into three equal horizontal portions, and two more imaginary lines are used to divide the frame into three equal vertical portions. The rule then states that the best compositional placement of the subject is at any of the intersections formed by these imaginary horizontal and vertical lines. It's a simple procedure and it often works quite well. But like all such rules, it shouldn't be followed slavishly. There are times when your shot will look best with a centrally placed subject. Just be aware of the bull's-eye tendency and avoid it when it hurts the shot.

Now, let's look at a couple of practical considerations.

9. *Bring lots of film with you.* In many of the countries you'll visit, American film is an imported item and may cost twice as much as it does in the States. There's nothing wrong with foreign film, but it also pays to be consistent and to stay with the film you're accustomed to using. Buying the film in bulk before you leave has two other advantages besides consistency. You can be absolutely certain of obtaining film that is well within its expiration date, and most suppliers will give you a 20-percent discount when you purchase five or more rolls at a time.

10. *Avoid X-ray inspection of your film.* There's a lot of controversy concerning the X-ray equipment used at airport security check stations. Security officials claim it doesn't damage film. Knowledgeable photographers claim it does and that the effect is cumulative. The more airports and security checks, the greater likelihood of image deterioration. I've seen the tests and I agree with the photographers: X-ray examination can cause image deterioration. So don't take chances. Insist that your film (including your camera, if it's loaded) be hand-examined. Alternatively, use the lead-lined bags that are specifically designed to protect film from X-ray damage. □

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LIMITED TIME OFFER

☐ There are so many areas to cover when you talk about travel that it's hard to know which of them should be given precedence. Of course, with all of photography's electronic adjuncts these days, it goes without saying that you should be well-supplied with batteries so that your electronic equipment won't fail you when you are faced with that once-in-a-lifetime shot.

But among them all there's one major subject in the area of domestic travel that continues to come to the fore and demands discussion: CB radio. If you're going to be doing any off-road traveling, the CB radio is going to be your constant friend and companion. If you are already CB-equipped, you know what I'm talking about. You've already had the experience of hearing somebody coming the other way tell you there's an accident in the left-hand lane ahead of you, and you pull into the right lane. As the other cars, not equipped with two-way radio, start to pile up into bumper-to-bumper configuration, you go whizzing past the crowd in the clear lane.

And while I certainly do not recommend that you violate the law, it's comforting to know in advance where the police radar traps are located, or when a "Smokey" has joined you on the road.

Another big advantage of CB is that if you get into any trouble on the highway, from getting a flat tire to running out of gas, a call on the emergency channel will get help to you quickly. But perhaps the biggest advantage of CB is that it gives you somebody to talk with while you drive. Your unseen companion (or companions) keeps you company, awake and alert. CB makes the trip safer and surer and keeps you from dozing at the wheel. Often, when several vehicles are headed in the same direction, they'll form an informal "convoy," keeping in touch all the way; and as one car "jumps off" at his destination, others will join in. CB on the road becomes a lot of fun.

People who aren't familiar with CB have lots of misconceptions. Let's lay these to rest right here and now. The most common is, "I don't plan to speak at all, can I get a unit just to listen in with?" While CB converters were once all the rage, the fact is that the units are transceivers, as opposed to transmitter-receivers. Some of the circuitry used for receiving is also used for transmitting, so there would be no great cost-cutting change between a "listen-only" unit and a transceiver. If you think you just won't be talking, simply don't pick up the microphone! However,

ELECTRONICALLY YOURS

BYRON G. WELS

A GOOD ONE FOR THE ROAD

chances are that sooner or later, you'll gird up your loins, put aside your mike fright, and be ratchetjawing with the best of them.

"I can't understand their lingo, and who can memorize all those 10-code numbers?" Listen in for an hour or so, and you'll have learned enough of the "lingo" to know exactly what they're saying. The language is self-descriptive and colorful once you catch on to it. "Motion lotion" is gasoline, "Smokey" is a policeman (they



Installing a CB rig is no great problem—you can hang it under the dashboard or install it in place of the present car radio. The Panasonic Dasher, shown here, provides all you need in the way of CB plus AM/FM stereo.

wear hats like Smokey the Bear). "Put the pedal to the metal" means to step on the gas. See? Nothing to it. The 10-code is a convenience, but you'll soon learn that only a few of the numbers are used often. It's only the newcomers who have a copy of the full code taped to their car visors who use the unusual numbers.

Others who have heard CB object to the constant rushing background noise. Yet they feel that if they turn the squelch up, they're going to be missing important and valuable information. Happily, one company—Pan-

asonic—has solved that problem, as well as some others you might not even have anticipated, with a unit called "The Dasher."

One of those other problems is that CB is always a target for rip-off artists. Put a CB in your car, and chances are unless you protect the car with a burglar alarm system or use a slide-out rack to take the CB with you wherever you go, some crook someplace is going to break into your car and make off with your rig. One good way to foil this is to mount the rig right into the dash—the way The Dasher is mounted.

It's really a simple matter to remove your old car radio, slip The Dasher into place, tighten the two control nuts, and slip the trim plate over the panel. Replace the knobs, connect the simple wiring, and you're all set.

How are you set? For one thing, The Dasher gives you excellent transmission and reception on CB, but that isn't all. You also get a superb AM/FM stereo system right in the same unit. What's more, the CB section can be set to the "monitor" position so you can drive along and listen to the broadcast radio secure in the knowledge that you won't miss an important shout on the CB rig. Should a CB signal come through, it will punch right through the broadcast signal, and you won't miss a thing!

The Dasher is so flexible, in fact, that you can even mount it under the dash or, if you use a van, in your overhead console.

Along with The Dasher, I installed one of the new Avanti antennas that requires no hole drilling, no unsightly mess, and installs quickly and easily. This antenna comes in several parts, one of which is a small black box with the lead-in cable attached. This box has a rubbery, sticky surface on the mounting face, and all you have to do is clean the windshield with the small alcohol swab supplied, peel off the green protective paper, and press the box against the window glass. The mounting base is coated liberally with silicone adhesive and is pressed in place on the glass' opposite surface directly over the box on the inside. Allow a few hours for drying time, and the ferrite antenna can be installed and adjusted. There are no holes, and transmission and reception take place right through the glass via inductive coupling!

The point is, actually, that if you aren't using CB now, you ought to be, and if you decide to take a CB set along on your vacation, you'll surely come home swearing by this amazing modern wonder. ☐

"After two lessons, I earned enough money to pay for the course and buy an autowinder..."

Kyle Myers
McLean, Virginia

So writes NYI student Kyle Myers. And that was only the beginning. Following an idea in the Course, Kyle got involved photographing dogsled races. In one weekend he made enough money to buy a new zoom lens. In his own words:

"I was a novice ... NYI training gave me the knowhow and confidence to turn pro."

While Kyle is not yet a full-time professional photographer, he found that NYI's person-to-person learn-by-doing training gave him the confidence to go right out and start making money as a freelance after just a few lessons. In the words of F. Gordon Lawson of Tempe, Arizona, who had taken two photography courses before he took ours:



"Thanks for giving a damn—about me, about my work, about the art of photography."

He thinks the NYI Course succeeded where the other home study courses failed because "your cassette-tape communication made the difference. Your teachers *cared* for me as a person. They were paid to teach me—but they weren't paid to be kind or to encourage. This personal touch really helped. I'm grateful for all you've done!"

And what is it we do? In the words of James Bell of Concordia, Kansas: "The down-to-earth critique of my photo assignments by the NYI advisor on cassette tape made me feel he was right at my side."

"He wasn't afraid to criticize, and this has built my confidence."



Joan Moncrieff Kingdon, an NYI grad from Fair Haven, N.J., who runs her own business, teaches photography and has won a string of awards, credits her training success to

"Individual attention and constructive criticism."

Another New Jersey graduate, Edward E. Astor of Fort Lee, had taken other classes and correspondence courses and felt "something was missing." But with NYI,

"The tapes make me feel I am right there working with you ... one-to-one!"

He called it "the most effective way of teaching I have ever come in contact with."

Does NYI training guarantee success? Of course not, though Charles C. Bell of Chesilhurst, N.J., says:

"The great success I have had has been through NYI,

and I highly recommend it." As a husband-wife team, he has owned and operated three studios with 12 employees.



From Winslow, Maine, Officer Timothy David Brill writes with pride:

"I am now head of Photographic services for the Maine State Police."

His photo evidence on everything from accidents to homicide is seen in just about every court in the state.

Perhaps the greatest success of all is neither the title nor the money you earn from photography but the sheer glory of seeing your own photos with your own credit line under them in an important magazine. George Stahlman of Fallbrook, Cal. (who took our course after retiring at age 65), fairly glowed when he wrote:



"Imagine seeing my own work in 'Sunset' and 'Popular Photography'!"

All these NYI graduates started the same way—by mailing a coupon like this. Don't you think you should too?

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□ According to *The History of Japanese Cameras*, all of the first Japanese shops to deal in photographic products were originally drug merchants who, foreseeing future demand, started handling photographic chemicals as a sideline. If so, one of these must have been Konishiya (House of Konishi), today known throughout the world as Konishiroku, or Konica.

Founded in 1873 by Rokuemon Sugui, this company is the second oldest Japanese photographic enterprise. Following Asanuma Company by only two years, Konishiroku is even older than America's photographic giant, Kodak.

Only imported materials were handled at first, but the company quickly prospered and by 1876 moved to a new location under the name of Konishi Honten. Soon after, in 1882, three factories were established for the domestic manufacture of mount paper, film holders and cameras. This was the start of an enterprise that would expand into virtually every phase of the photographic industry.

By 1902 another factory had been established in Yodobashi, the present-day Shinjuku, for the manufacture of dry plates and photographic paper. Sakura Hakkin (White Gold), Japan's first photographic paper, was introduced the next year.

Around this time there also appeared a wide variety of cameras made by this company. These include box cameras such as the Cherry, Champion and Honor as well as folding cameras such as the Pocket Prano, Prano, Reflex Prano (which looks somewhat like a Graflex), Stereo Prano, Sakura Noble, Pearl, Idea Telephoto Camera (Japan's first camera with a telephoto lens), Minimum Idea, Koroku and many more. The famous Lily folding cameras also were produced during this period.

The Pearlette cameras appeared in 1925 and went through a long series of models that enjoyed great popularity. After this, new developments followed one after another. Sakura film came in 1929, followed by the Hexar lens in 1931, Sakura X-ray film in 1933, Sakura 16mm cine film and infrared film in 1934, and the Baby Pearl cameras in 1935.

In 1936 the company was incorporated as Konishiroku Ltd. Sakura Pan F film also appeared that same year, followed a year later by the Semi Pearl cameras. During the war, in 1941, the company introduced Japan's first color film.

After the war came the first cameras bearing the Konica name. The first, which appeared in 1948, was the Konica I. It was an improved ver-

FOR EAST JOURNAL

CHARLES MARAH

KONISHIROKU— 106 YEARS YOUNG

sion of the "Rubicon," developed during the war for indirect X-ray photography. With a rangefinder using images of two different colors and helicoid focusing that required only one-sixth of a turn from one meter to infinity, this was considered the most easily focused camera at that time. Next followed the Konica IIA, which incorporated a mechanism that automatically adjusted the flash lag in accordance with the focused distance. The Konica III had a unique film-



On the new Konica FS-1 everything is automatic except the film rewind. Photographers may want to do something for themselves!

advance lever on the front of the camera, while the Konica IIIA had automatic parallax correction, and the Konica IIIM had an attachable exposure meter and could be used for both full- and half-frame shots.

The Konica F, which was put on sale in 1960, was Japan's first 35mm SLR with a built-in exposure meter. It was also the first with a focal-plane shutter having speeds to 1/2000 second—a development that became the Copal Square shutter.

In 1962 came the Konica FSW, which featured a built-in three-hand clock that allowed the day and time to be printed on the negative as the picture was taken. Also of interest are the Konica Autorex of 1965, which allowed the photographer to switch between full and half frame without removing the film from the camera, and the Konica FTA of 1968, which was Japan's first SLR with through-the-lens, shutter-priority, automatic exposure.

An interesting prototype was an-

nounced in 1963 and exhibited at Photokina that same year but never reached the market. This was the Konica Domirex, which had two half prisms, each surrounded by ten dot mirrors, as part of the lens configuration. This arrangement eliminated the need for the mirror to spring out of the way when the shutter was released. Also included was a built-in EE selenium-cell exposure meter.

Many pros and advanced amateurs will perhaps recall the Koni-Omega Rapid press cameras and the Koni-Omega Flex M, the first twin-lens reflex with interchangeable backs.

As we get closer to the present, one of the most outstanding achievements of Konishiroku is the Konica C35AF, the first autofocus camera to actually reach the market. According to Mr. Nakadai, Senior Staff Member of the Public Relations office, sales are tremendous and the company can hardly keep up with demand.

But Mr. Nakadai was more interested in showing me the latest development of the Konica line: the Konica FS-1. Besides the built-in power winder, another Konica first, the first things to strike the eye are the lack of a film advance lever—which must indicate the company's faith in the reliability of the winder—and the 40mm f/1.8 standard lens. According to Mr. Nakadai, the theory is that with the usual 50mm standard lens, the photographer often finds himself in the position of needing a 35mm wide-angle lens. By making a standard lens with a focal length of 40mm, this one lens can cover the field for both the 50mm and 35mm lenses, making it possible for the photographer to carry one less lens.

Of course, this camera also has the shutter-priority automatic-exposure system, which Konica feels is more convenient and practical than the aperture-priority type. And film loading is automatic as well—a feature Konica feels will help beginners who don't know how to load their own film. The photographer merely pulls out the film leader, sets it over the take-up spool on the right side, and closes the back cover. The camera does the rest.

There's also a digital self-timer that blinks once a second for the first four seconds, twice a second for the next four seconds, and four times a second for the last two seconds.

Accessories include an electronic flash, the X-24, which synchronizes with the winder, and various remote control devices. When asked why there is no power rewind, Mr. Nakadai slyly remarked that the photographer may want to do something himself. *Sayonara!* □

On Photographing the Invisible

To the naked eye, it was a Swedish 80-ore postage stamp. A rarity, and very valuable.

The camera, however, told quite another story. The stamp was a counterfeit.

Faint traces of tampering that were hidden to the naked eye were revealed by the camera. Someone, somewhere, had ingeniously altered the stamp by chemically removing a surprint. The stamp was worthless.



To the naked eye (left), the stamp was genuine. To the camera (right), it was a counterfeit. Note the faint, dark traces of tampering now revealed in the upper section.

What manner of exotic camera was this that could "see" the invisible?

The lens: one of the 21 in the Hasselblad arsenal, the 105mm Zeiss UV-Sonnar f4.3. Designed for photography within the ultraviolet portion of the electromagnetic spectrum, its costly quartz elements can detect radiations that are unseeable by the human eye.

It has peered at objects in outer space, examined forgeries, laid bare the secrets of counterfeit money. Not a lens for everyone, obviously, but an indication of just how awesomely comprehensive the Hasselblad System is.

The camera: an otherwise perfectly standard Hasselblad 500C/M.

normally fitted with an 80mm Zeiss Planar f2.8 multi-coated lens.

This is the basic model that allows you to tap into the vast Hasselblad System. It is one of the most bewilderingly versatile cameras the world has ever known. Yet so marvelously simple to operate that it often plays the part of the family snapshot camera.

A True System.

The Hasselblad System is a prodigious array of 4 cameras, 21 lenses, 8 viewfinders, 9 film magazines, and over 300 other accessories. Choose the right pieces, and your 500C/M would be equipped for sports, aerial, architectural, and fashion photography.

And portrait, landscape, medical, underwater, and news photography.

And wildlife, laboratory, industrial, and child photography.

And you would always have the right film in the camera at the right time. You can shift from color to black-and-white and back again to color—and resume shooting at precisely the right frame—by popping in the protective dark slide and switching film backs.

The Camera with Nine Backs.

There is a small button on the film back of every Hasselblad 500C/M. Slide it sideways with your thumb and the back will come away in your hand.

The standard back holds 12 exposures. Each frame of film is 2¼ inches square, almost four times the area of a 35mm frame. (See box, below right, for actual size.)

This is only the beginning. There are eight other backs available: Backs that let you change to a 6 x 4.5cm format...or a 4.5 x 4.5cm superslide format for showing in any 35mm projector. Backs that give you a choice of 1, 12, 16, 24, 70, or 500 exposures. A back that is a sheet-film adapter.

Even two backs for Polaroid film, so you can check composition, lighting, and exposure ahead of time.

You begin to realize why eight out of ten top commercial photographers surveyed name Hasselblad as the medium-format camera used in their work.

Retained Value vs. Obsolescence.

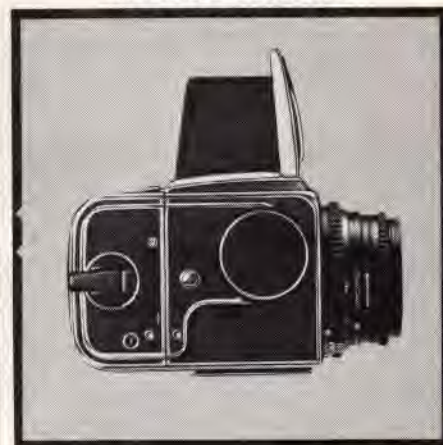
In an age when machines spew out cameras in the tens and hundreds of thousands, when flashy new models thrust last year's marvels into early obsolescence, Hasselblad goes its own way.

Planned obsolescence is taboo at Hasselblad. All but two of the accessories for the 500C/M will fit every Hasselblad made since 1957 (except the Super Wide C)...and will fit every future Hasselblad.

The greater part of a year is spent on building each camera, much of it crafted by hand. And fully one quarter of the work force devotes its time to nothing but quality control.

Little wonder, then, that a pre-owned Hasselblad commands such a high price...if its owner can be persuaded to part with it at all.

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The Hasselblad 500C/M.

A lavish brochure is available free if you write: Braun North America, Dept. PP5H, 55 Cambridge Parkway, Cambridge, Mass. 02142. Braun North America is a division of The Gillette Company and exclusive marketer of Hasselblad cameras in the U.S.

PRODUCT PROOF sheet



NEW ACCESSORIES FOR BRONICA ETR SYSTEM

The Bronica ETR medium-format (4.5x6cm) system is being expanded with new professional accessories that are readily interchangeable with both the ETR and ETR-C camera bodies. The list of new accessories includes: a sports finder for rapid location of moving subjects; a system of extension tubes for close-up photography; an automatic bellows for macro work; a quick-focusing lever, a quick-release tripod-mount set; a remote battery pack; a suitcase-style compartment case; and a lens-pouch case. The suggested retail prices for the accessories are: sports finder—\$176; extension tubes (depending on model)—\$216, \$226, \$239; automatic bellows attachment—\$605; quick-focusing lever—\$16.50; quick-release tripod-mount set—\$69; lens pouch—\$34; compartment case (leather)—\$270; remote camera battery pack—\$31. For more information contact Ehrenreich Photo-Optical Industries, Inc. (EPOI), 101 Crossways Park West, Woodbury, New York 11797.



CARRY ALL YOU NEED... SAFELY

The new Sports Pouch Air Cushion Carry All from SIMA Products Corporation is a waterproof, floatable, shock-resistant pouch designed to give equipment total protection from the rigors of travel or outdoor activity. Easily inflatable with a few puffs of air, this roomy (12x14-inch), heavy-gauge-vinyl pouch comes equipped with a Velcro self-gripping fastener and an adjustable shoulder strap. The Sports Pouch is bright yellow for good visibility on the water or in the woods and is designed to protect cameras, lenses, film, binoculars, etc., from shock or water damage. Sports Pouch has a suggested list price of \$14.95. For more information contact SIMA Products Corporation, 4001 West Devon Avenue, Chicago, Illinois 60646.



HERE'S A FLASH... FROM SUNPAK

The Sunpak 120 and Sunpak Auto 121 electronic flash units are two compact flash units designed for the amateur. The Sunpak Auto 121 allows either automatic or manual exposure control and is automatic from 19 inches to 12 feet with flash duration ranging from 1/5000 to 1/45,000. Recycle time is six seconds with AA alkaline batteries and four seconds with AA nickel-cadmium batteries. The unit incorporates both a hot-shoe and a convenient open-flash/ready-light button. The Sunpak 120 has the same basic features as the Auto 121 with manual operation only. Both units have a guide number of 46 with ASA 100 film and give up to 250 flashes per set of two AA alkaline batteries. The Sunpak 120 has a suggested list price of \$22; the Sunpak Auto 121 lists for \$38. For more information contact Sunpak Division, Berkeley Marketing Companies, P.O. Box 1102, Woodside, New York 11377.



HANIMEX INTRODUCES NEW POCKET CAMERA

Hanimex USA, Inc., introduces the VXL 110 Pocket camera, which accepts ASA 400 film. The lens is a f/1.9 25mm, four-element, optical-glass-coated instrument that focuses from three feet to infinity. The electronically programmed shutter ranges from 1/30 to 1/100. Other features include LED readouts in the viewfinder that indicate over- and underexposure, a bright-line viewfinder with parallax mark, hot-shoe for electronic flash, cable release and tripod sockets. The suggested retail price is \$89.95. For more information contact Hanime USA, Inc., 1801 Touhy Avenue, Elk Grove Village, Illinois 60007.



VIVITAR INTRODUCES CLOSE-FOCUSING ZOOM

The new Vivitar 100-200mm f/4 close-focusing zoom lens is designed to be lightweight and small enough for most handheld applications, weighing 22.9 ounces and measuring 5.3 inches in length when focused at infinity. It focuses as close as three feet from the film plane, allowing a maximum reproduction ratio of 1:3. It features a computer-generated optical design of 13 elements in nine groups, has multicoating to minimize flare, has an aperture range from f/4 to f/22, and its angles of acceptance are 24 degrees (at 100mm) and 12 degrees (at 200mm). It is available in the following lens mounts: Minolta MD, Canon FL/FD, Nikon/Nikkormat AI and F, Konica Autoreflex, Olympus OM, Pentax K and M, and Universal thread. The lens has a suggested list price of \$354. For more information contact Vivitar Corporation, 1630 Stewart Street, Santa Monica, California 90406.

(Continued on page 109)

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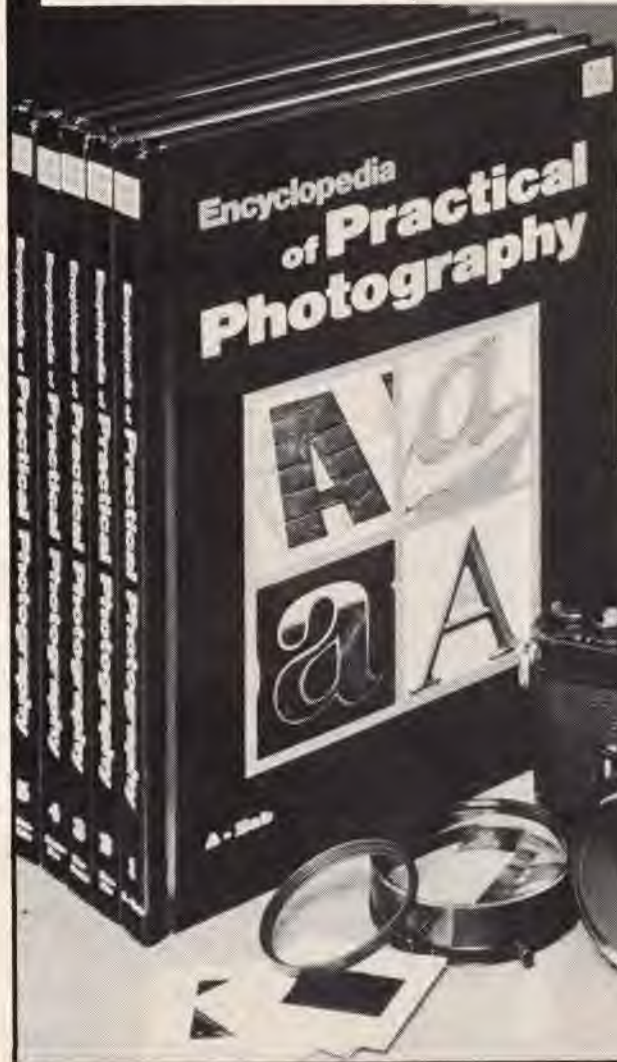
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Olympus was the first to cut the bulky, boxy SLR down to size.

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mounted on the OM-1 or OM-2, can reel off five frames per second without mirror lock-up. (The OM-10 accepts the 3 frame per second winder.)

The system includes 14 focusing screens, Zuiko lenses from 8mm to 1000mm, as well as equipment for photomicro and macro photography. So you can also take Olympus on the kinds of explorations that never leave the lab.

A camera for every need. As simple as 1, 2, 10. The OM-10 is the newest OM camera. It is fully automatic and it offers the features and ruggedness Olympus is famous for. For less.

The OM-1 has sold more than any other compact SLR, and for good reason. It was the first and is still the last

word in providing full exposure control.

The OM-2 is the fully automatic camera that has the photographer's future in focus. It offers greater accuracy in light measurement because internal sensors measure the light that's reflected off the film during actual exposure of up to 2 minutes. By also incorporating the full exposure control of the OM-1, the OM-2 becomes the ultimate SLR.

For a detailed brochure, write to Olympus, Woodbury, New York 11797.

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Controls at the rear of the unit adjust the 522 for different power sources and operational modes. It includes a computer "Auto Signal" so you can check automatic exposures before you take the picture.

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It gives you perfect automatic exposures from 1.6 feet to as far away as 42 feet. What's more, you can choose four different f-stops or any intermediate setting between them for precise depth-of-field control.

Sunpak Division, Berkey Marketing Companies

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Power Ratio Control!

Switch the Auto 522 to manual, and Sunpak's unique Power Ratio Control lets you select 19 click stop settings from Full Power all the way down to 1/64th Power (seven f-stops) for unlimited creative effects. For example: fill-in flash, macro or close-up photography, depth-of-field control, stop motion and high-speed sequences.

A Total System featuring Sunpak's unique "snap-on" Zoom Tele Kit.



Standard Equipment Includes:

Quick-Release Bracket, Clamp, Battery Holder, PC Cord and Filter Holder.

Sunpak Wrote the Book on Electronic Flash

...in fact, we have two of the most beautifully illustrated and complete guides to the vast potentials of electronic flash ever created.

Send for them—they're free!

Sunpak offers you many quality flash units with built-in value including Automatic Thyristor Handle-Mounts and Manual/Automatic/Thyristor Shoe-Mounts. They're at your photo dealer now.



other VOICES

ADDRESS ADDITION

The address for the DensiKit given in "Guide Lines," March issue, was incomplete. The correct address is: PhotoAids, Suite 234, 3010 Santa Monica Boulevard, Santa Monica, California 90404. Our apologies for the error and inconvenience—Ed.

GOOD STROKES

Very seldom does reading material of any sort offer answers to a question not yet formed. Peggy Sealton's "Stress Points" (see "In Sight," February, 1979 issue) was my answer to "Why photography?" Please thank her for me.

Linda Smith
Pittsburgh, Pennsylvania

VACATION BOOKKEEPING

Off and on I have read of various methods for accurately identifying the many rolls of film taken on an extended vacation trip or assignment. Most of these procedures seem unnecessarily complex, so I'd like to offer my own simple method.

1. Determine how many rolls of film you plan to take.

2. Purchase a spiral notebook about 3 x 5 inches, an inexpensive mechanical pencil and a 1/8-inch-tip red or green highlighter to print big numbers from one to the maximum number of rolls to be carried. Enter the numbers one at a time on one side of the page only—that way there is plenty of room for notes later on.

3. As each fresh roll is put in the camera, enter the date and place on the page and take a picture of the page with roll number and identifying information as the first shot. Use the rest of the page to enter any date you feel is important.

4. When you get home and have the film processed, the boxes can easily be sorted by the first roll-number picture. I like to put the roll number, exposure and trip name on each slide. The notebook is retained to help prepare the slide-show script and identify any rejects.

This approach has worked well for me for a number of years.

W.L. Hoffman
Stroudsburg, Pennsylvania

NEW MUSE TO CHOOSE

Thanks for Markene Kruse-Smith's delightful piece in the February issue, "Focus on Filmmaking: What to Do

While You're Waiting for the Muse." My own special technique for getting the creative juices to flow is to write my first drafts with a fountain pen, thus ensuring that I'll be in close contact with the paper when the magic moment finally arrives. After all, I can't paint my toenails, can I? If I did, my wife would probably take off with some young disco king blessed with never-ending vitality—and who needs this after 20 years of heavenly marital bliss!

But I have another solution for both Markene and me. Put away your nail polish, let your houseplants remain thirsty, and welcome the tenth muse, *Photomia*, the muse of photography. Never again will we experience those dreadful moments of indecision marked by endless cups of coffee and legions of foul-smelling cigarettes!

Unfortunately, there is just one catch. I call it Catch-35 (or Catch 8mm, 16mm, 120, 8 x 10, etc.). You must memorize the following poem (with apologies to John Milton), or *Photomia* will never appear (sometimes disguised as a ray of light) to guide your fingers over the materials that both challenge and frustrate us. If the poem doesn't seem to do it, try wearing a toga while reciting it. Sandals optional, of course. Keep up the good work, and I'll be watching for Markene's next column.

IL PHOTOMIA*

Hence, decrepit inactivity,
The brood of laziness without father
bred!

Dwell in some idle brain,
A competitor's, I hope.
But, hail! thou Goddess, not so
homely-uh!

Hail divine Photomia!
Whose help I need, as we all know,
To keep my blank mind on the go.
If words of wisdom you can give,
Photomia, with thee I'll live!

*Some diehards insist on using the masculine Photomio. But who ever heard of a male muse?

H.T. Kellner
Author, *Money in Your Mailbox: A Guide for Freelance Photographers*
Baldwin, New York

MORE MUSINGS

If Markene Kruse-Smith put out a bowl of fruit for me, I'd do her toenails. By the way, since when has Marki smoked cigars?

Joe Novak
Cambridge, Massachusetts

SUNPAK AUTO 522 SYSTEM



A Total System for Greater Creative Control!

Optional accessories include:

1. Interchangeable Zoom Tele Kit that boosts the guide number for use with telephoto or zoom lenses.
 2. Filter Kit with nine different filters, including two diffusers for use with wide-angle lenses.
 3. Sunpak Quick-Charge Nicad Battery Cluster (recharges in three hours with Sunpak Battery Charger).
 4. Sunpak Powerpak for 510V battery and new Sunpak Rechargeable 510V Nicad Battery.
 5. Multi-Voltage AC Adapter.
 6. Extra AA Battery Holders for fast reloading (uses six alkaline or nicad batteries).
 7. Quick-Release Brackets for 35mm and 120 roll film cameras.
 8. Remote Sensor.
 9. Auto Slave.
- and more!

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MINOLTA XD-11

Introducing the future of photography.
It can change the way you take pictures.



Tomorrow's camera is here: a compact 35mm SLR so advanced that it can actually correct exposure errors, even if you fail to.



The XD-11 accepts any Minolta lens without modification. If you own Rokkor-X, Rokkor or Celtic lenses, you'll be glad to know that they can be used without modification on the XD-11 in the aperture-priority and manual modes. A new series of Rokkor-X and Celtic "MD" lenses has been designed for use with the XD-11 in all modes.

Compact. Lightweight. Incredibly smooth and quiet.

The XD-11 is compact, but not cramped. Lightweight, but with that solid, substantial Minolta feeling. Your fingers fall into place naturally on oversized controls. The back is contoured to fit your hands. Glove-soft leather-like material cushions the body.

The film advance is silky smooth, without a trace of harshness. A feather touch on the electromagnetic shutter release activates the metering system and viewfinder display. Exposures are made effortlessly, with vibration and sound cushioned by insulation and a specially designed damper mechanism.





The smallest, lightest auto winder you can own.

The optional Auto Winder D for the XD-11 is the smallest and lightest available today. It attaches in seconds, without removing any caps. And you can reload your camera, rewind the film, make multiple exposures or operate it remotely without removing the auto winder.

The winder will advance the film one frame at a time, or continuously at two frames per second. It stops automatically at the end of the film. An LED flashes to show when the winder is operating and glows steadily when the roll is completed.



Multi-mode operation for unprecedented creative freedom.

In aperture-priority mode, you set the lens opening and the XD-11 sets the shutter speed automatically. This lets you control depth-of-field and use close-up equipment and mirror lenses automatically. Shutter-priority mode lets you control shutter speed while the XD-11 sets the aperture automatically. For creative control in either automatic mode, you can modify exposure up to ± 2 EV. Or you can set both shutter and aperture yourself in the metered-manual mode.

An electronic flash that automatically synchronizes with an auto winder.

The Auto Electrolash 200X automatically sets the camera's shutter speed at 1/100th of a second. A pulsating LED in viewfinder shows when flash is ready to fire. Until then, the XD-11 will continue to operate automatically in either mode.

The refinements.

Easy multiple exposures, even with the auto winder in use. A variable self-timer. A window to show that film is advancing properly. A viewfinder curtain to keep light out during tripod operation. A button to pre-view depth-of-field.



At your photo dealer. Or for literature, write Minolta Corporation, 101 Williams Drive, Ramsey, New Jersey 07446. In Canada: Minolta Camera (Canada) Inc., Ontario.

A total-information finder so bright it defies description.

The light-gathering power of two million conical prisms makes the XD-11 viewfinder the brightest in all of 35mm SLR photography. And the combination real/split-image/micropriam screen assures fast, effortless focusing and composing.

The instant-return mirror is the largest in any 35mm SLR, meaning there's no image cut-off even with the longest telephoto lenses.

Regardless of operating mode, you need never lose sight of your subject to make exposure adjustments. Windows show pre-selected aperture and/or shutter speed. LED read-outs change to show shut-

ter speed or aperture being set automatically. There are also LED flash-ready and under/over exposure warnings. And in the shutter-priority mode, even if you fail to heed exposure warnings, the XD-11 will automatically adjust speed for correct exposure within the range of the shutter.

Electronically controlled shutter speeds are flawless from one second to 1/1000th second. No matter how quickly the light changes, exposure is infinitely precise. And when batteries fail, the shutter will operate at "B" for time exposures and "O" at 1/100th second.



Aperture-priority mode



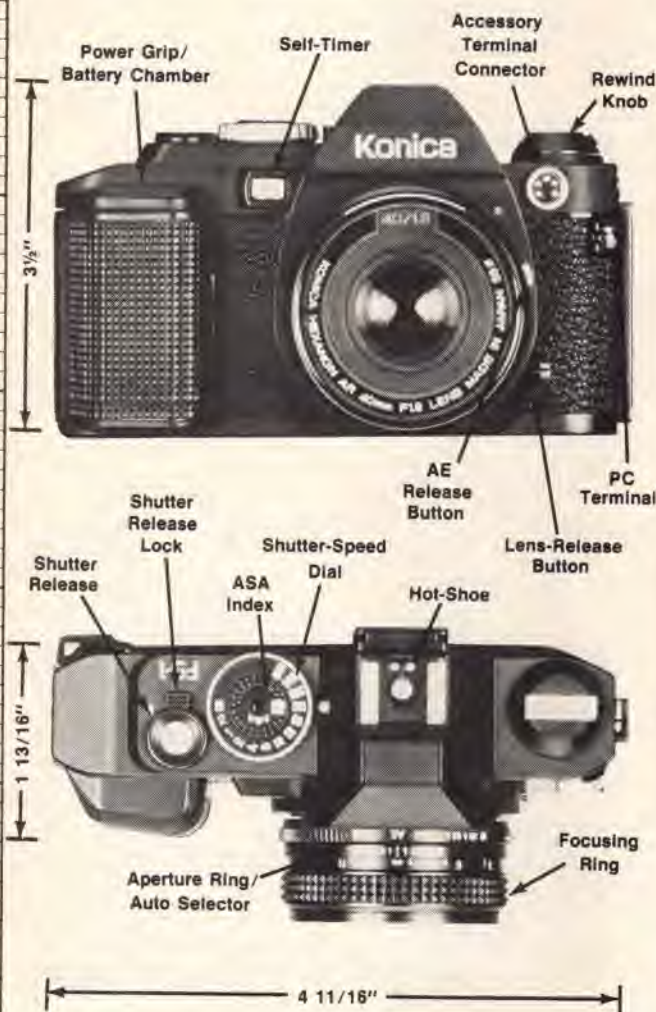
Shutter-priority mode



Metered-manual mode

Photographic's SPEC SHEET

KONICA FS-1



TYPE: 35mm single-lens reflex

SIZE: 4 11/16" long x 3 1/2" high x 1 13/16" deep (146mm x 90mm x 46mm) (body only)

WEIGHT: 18.8 oz. (535g) (body only)

LENS MOUNT: Konica 27mm bayonet mount

PRICE: \$555 with 40mm f/1.8 normal lens

DISTRIBUTOR: Konica Camera Company, 25-20 Brooklyn-Queens Expressway West, Woodside, New York 11377

FEATURES

Normal Lens: The 40mm f/1.8-22 normal lens has six elements in five groups, 56° angle of view and minimum focusing distance of 17.7 inches. It weighs 4.8 ounces and has a 55mm screw-in filter size.

Viewfinder/Focusing System: Eye-level, fixed pentaprism with rectangular eyepiece that accepts accessory eyecup, diopter correction lenses, magnifier or angle finder. Focusing screen features central split image surrounded by microprism collar and fine groundglass circle. Viewfinder information includes

over- and underexposure LEDs, battery check, manual operation indicator, aperture indication, flash-charge-completion indication. Mirror is instant-return type.

Shutter: Electronically controlled, vertical-running metal Copal focal-plane shutter, with dual micro-solenoid controller. Shutter speeds from two seconds to 1/1000 second plus B.

Exposure Control System: Automatic operation with shutter-priority and full-manual operation are provided. "AE" setting on lens aperture ring sets auto mode. Through-the-lens metering in both automatic and manual modes by means of gallium arsenide phosphide (GaAsP) photo cell, which provides 1000-times faster light-measuring response than conventional CdS cells. Metering is center-weighted. Depressing shutter release 0.7mm turns on power for metering; depressing shutter release another 0.4mm activates metering memory, mirror flip-up, aperture adjustment, shutter release, mirror return and film advance. ASA index is incorporated in shutter-speed dial atop camera. Film-speed range is ASA 25-3200.

Flash Synchronization/Accessory Shoe: X-sync provided for shutter speeds up to 1/60 second in manual mode; automatic flash sync at 1/100 when Konica X-24 automatic electronic flash is used in automatic mode. Sync provided via PC connector and hot-shoe.

Film Advance/Frame Counter: Built-in electric motor automatically advances film to first frame when 35mm cassette is inserted into camera. Motor automatically advances film after each exposure. Automatic film advance allows single exposures or repeated exposures up to 1.6 frames per second if shutter release is held down. Automatic-resetting frame counter shows number of frames exposed.

Power Supply/Battery Check: Four alkaline AA penlight batteries in quick-change module provide power for entire system. Warning light in viewfinder pulses when power level is low but still sufficient to expose five 36-exposure rolls of film. Normally, a fresh set of four alkaline batteries will provide power to expose 20 36-exposure rolls.

Self-Timer: Digital-control self-timer button on front of camera sets delay of ten seconds. Self-timer button also contains red LED light that starts to blink when button is depressed. Red LED blinks faster and faster until shutter releases. Self-timer can be canceled midway by depressing shutter-release button to first stop.

Lenses: Including the new 40mm normal lens, 26 Konica Hexanon lenses are available, from 15mm fisheye to 1000mm telephoto, including 35-70mm, 45-100mm and 80-200mm zooms and 55mm and 105mm macro lenses.

Accessories: Konica system accessories for other Konica cameras can be used with the FS-1, including automatic bellows, slide copier, macro stand, copystand, close-up lenses, microscope adapter, extension tube set. Konica X-24 automatic electronic flash unit was specifically designed to be used with the FS-1, and, once attached, receives ASA data information from camera's central processing unit. The X-24 flash can remain coupled to the FS-1 at all times; until the flash is activated and fully charged, the camera will operate in normal auto mode. When flash is fully charged, LED in viewfinder will light and camera's computer will automatically adjust for auto flash operation.

**The right light for any
print, for every print
you'll ever make...
black & white and color!**

Condenser vs. diffusion printing:
the controversy continues. Of course,
experienced photographers know each
method has its special applications...
and limitations:

- Diffused illumination provides more uniform coverage and spotless prints.
- Condenser light is ideal when printing speed is the prime consideration and for the sharpest black & white prints.

Why "make do" with one, when you can make *one* do it all? The Beseler Dual Dichro (for the Beseler 23C and 23CII Enlargers) is the only dichroic colorhead that gives you the luxury of choice.

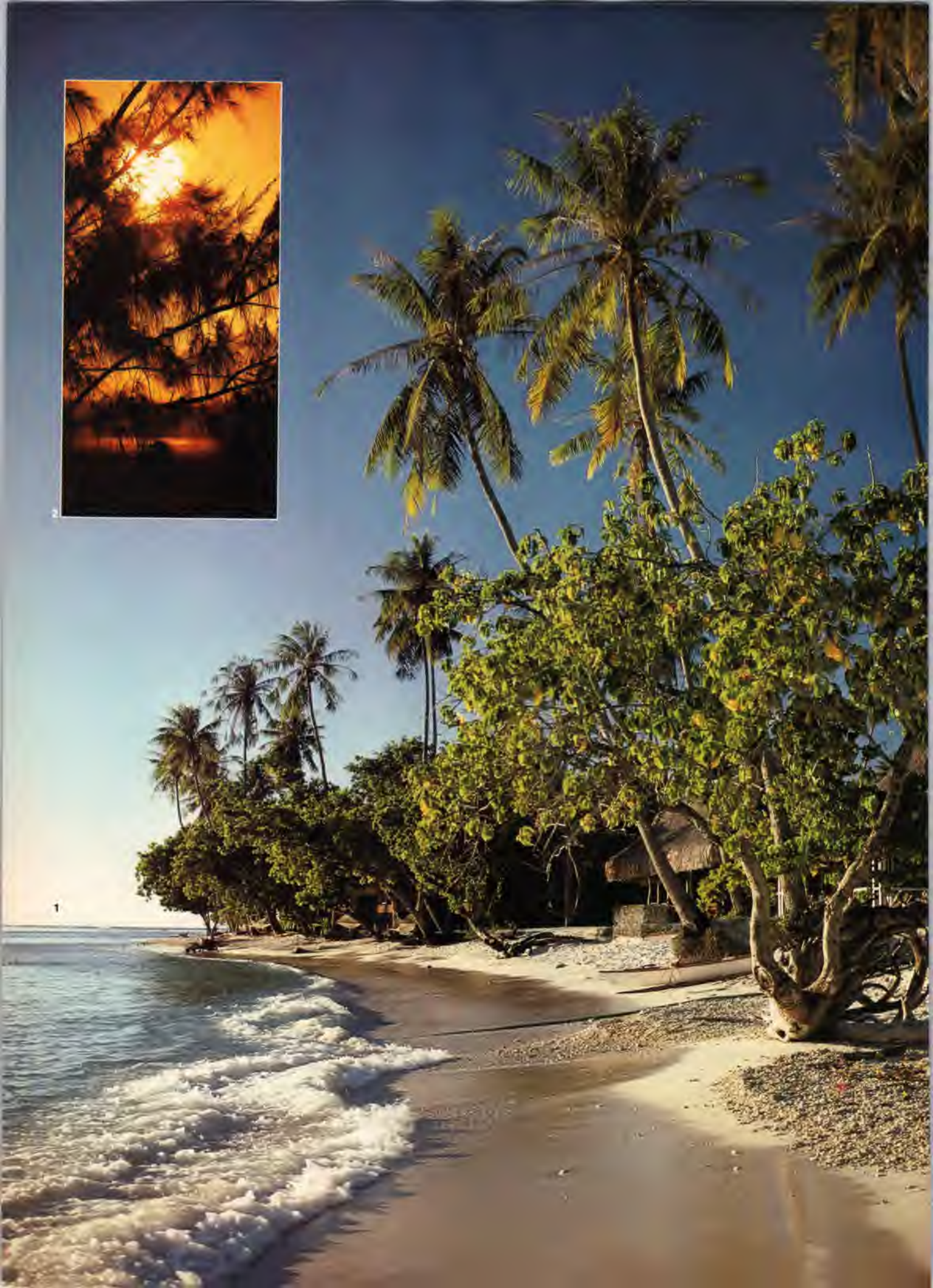
Advanced features like a Mode Recognition Circuit with illuminated indicators and an Electronic Paper Saver Circuit are just a few of the extras that are described in our new 23CII/Dual Dichro brochure. See your Beseler dealer or write to us.

**The revolutionary
Beseler Dual Dichro
Colorhead...**

**the best reason
to own a 23CII
Enlarger.**



Beseler Photo Marketing Co., Inc., 8 Fernwood Road, Florham Park, N.J. 07932/ Dept. DD/PE





Tropical Photography

Bringing Back Pictures From Paradise

By Bill Hurter

Boarding the UTA French Airlines jet bound for Tahiti took no effort at all. The air in Los Angeles was typically brown and dirty. It was hot and I was tired of cities. The prospect of a week in paradise was almost too much even to think about. Visions of coral beaches, swaying palms and mystical natives strolling the sands filled my brain as the jet engines' drone coaxed me into a relaxing sleep.

In the early morning darkness after eight hours of nocturnal flight I could barely make out the outline of the island of Tahiti, but once landed, the big doors thrown open, there was no mistaking it. We had arrived in paradise.

To a photographer there is no bigger thrill than to be turned loose in an environment where beautiful pictures seem as plentiful as grains of sand. At every turn one can take a photo of lasting beauty. Trees, mountains, people and oceans seem to fit perfectly together into an ever-moving, ever-changing mural of color and tropical splendor. The senses are alive, heightened, and the world seems perfect.

But, as I found out rather quickly, even paradise has its drawbacks. Whether in Tahiti or Florida, any tropical environment can present formidable problems to photographers. The elements of heat, humidity, salt air and abrasive dust can combine to destroy

photographic materials and equipment at an alarmingly fast rate.

I am getting way ahead of myself. Before you experience the joys of photography in the tropics, there is much planning and preparation to be done.

PRE-PARADISE PREPARATION

In addition to your camera and most-often-used lenses, your camera bag should include spare batteries, a lens shade or two to ward off glare, and (don't forget this) a polarizing filter. A polarizing filter is an essential item in the tropics not only for darkening or dramatizing skies, but for directing nasty reflections off vegetation, sand or water. Your lenses should be fitted with haze or skylight filters to protect the glass from the ever-present tropical dust. In addition, a homemade soft-focus filter or diffusion disk will be extremely useful in cutting contrast in shots taken during the harsh light of midday.

If you're in doubt about which lenses to bring, remember you will be better off traveling light. If you have the lenses, a good selection would be a wide-angle lens (24-35mm), your normal lens, a short telephoto (85-135mm) and possibly a zoom. Special-purpose lenses will probably find little use and will just weigh you down. Instead of taking a macro lens, for instance, consider using close-up lenses that attach to the lens front like filters.

Normally I carry a small flash in my bag, but on this trip I took along a Konica C35AF with built-in flash. The flexibility of having an extra camera body with the capability of autofocus

extended my picture-making opportunities, particularly indoors where focusing would have been difficult at best. Outdoors, the built-in flash served well for flash-fill situations.

Rounding out the list of equipment should be a monopod or other camera support (monopods are excellent for traveling because they take up so little room), a can of insect repellent in case you get caught in close company with some carnivorous bugs, and a good map of the areas you will be visiting. In addition, you should have a towel or chamois handy to dry off your equipment after a tropical rain. (For more on travel preparation, see "Portraits of Foreign Places," page 56; "Be the Well-Prepared Traveler," page 65; and "Talking Tech," page 82.)

TROPICAL HAZARDS

Conspicuously absent from the list of things to take is film, and that is because special precautions should be taken for transporting film in the tropics. Regarding the types of film you should take with you on your travels, Kodak recommends you take about twice as much color film as black-and-white and that you have at least one 36-exposure roll for each day you will be traveling. Carry a few rolls of fast film such as one of the ASA 400 color slide or print films for low-light situations, but otherwise try to stick with one film type. Kodak suggests the ASA 64 slide films meet most of the vacationing photographer's needs.

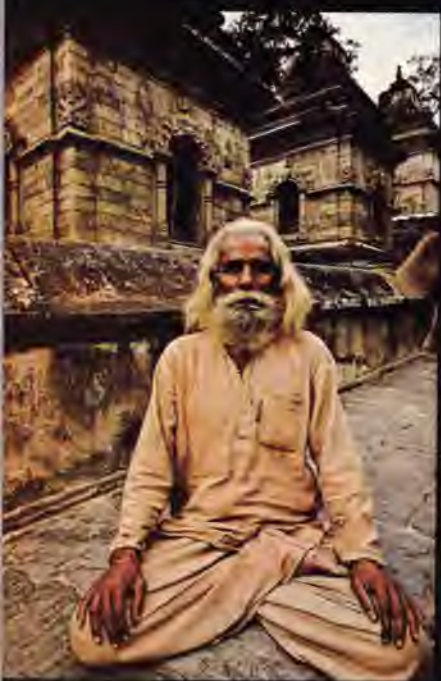
Since all film is perishable, and since color film is particularly susceptible to deterioration from the extremes of tem-

1. Pure white beach of Tahitian Isle of Huahine was photographed in crisp golden light of late afternoon. Polarizing filter was used over 35mm lens to darken far corner of sky.

2. Typical tropical sunset was photographed with 500mm mirror lens on monopod. Shooting through swaying trees adds different dimension to otherwise ordinary sunset.







Nikkor lenses,
in the



© Nikon Inc. 1978

There is a restlessness that lives within creative people. It drives them to explore new ideas... new ways of seeing.

Many of them are drawn, as you were, to Nikon to find fulfillment for their creativity. For, no other system offers the creative potential you can enjoy with the combination of your Nikon camera and Nikkor lenses.

Unequalled optical variety is the most obvious advantage of the Nikkor lens system. But, even more important is the magnificent and consistent image quality produced by these famous optics. And, with nearly sixty Nikkors to choose from, you never need compromise the standard of excellence that led you to Nikon originally.

Every Nikkor lens is all Nikon, from its optical glass to its exclusive Nikon multi-layer Integrated Coating, fitted into a rugged Nikon mount that is engineered with surpassing precision. And, only Nikkor lenses are designed to mate perfectly with your Nikon system camera, a vital link in the chain that leads to the ultimate reward in photography: The Nikon Image.

Let this quality spur your imagination as you pursue your visions through the exciting expanse and depth of Nikkor wide angles, with exquisite sharpness even at close range thanks to Nikon-developed "floating elements." Reach out for distant scenes with a Nikkor telephoto... and marvel at the spectacular performance made possible by Nikon ED glass and Nikon-innovated internal focusing. Experience the infinite flexibility of Nikkor Zooms... the first 35mm zoom optics to rival the finest conventional optics in quality. The fascinating effects of a Fisheye Nikkor (another Nikon first). The scalpel-sharp definition from life-size to infinity of a Micro Nikkor...

No matter how far your imagination may take you, you can rely on Nikkor lenses for consistent, superlative quality that can fulfill and even exceed your expectations. See them at your Nikon dealer (you'll find him in the Yellow Pages), and ask him also about the traveling Nikon School. Or, write to Nikon Inc., Dept. N-42, Garden City, New York 11530. Subsidiary of Ehrenreich Photo-Optical Industries, Inc. (In Canada: Nikon Division, Anglophoto Ltd., P.Q.)

creative elements Confidence of Nikon

Tropical Photography

perature and moisture, film is best kept where it will be safe from air, such as in an airtight plastic resealable container. Inside the container along with the film a desiccant such as silica gel should be placed. The gel will absorb moisture and keep the container's humidity below 50 percent. If you're on a prolonged stay in the tropics or carrying a lot of film, you should carry several tins of desiccant with an indicator dye, which turns from blue to pink when the desiccant ceases to absorb moisture. Silica gel can be reactivated (dried out) by baking it in a 300°-400°F. oven for at least an hour and



1. This pure Tahitian sunset was photographed with catamaran in foreground to offset and balance composition. The sunset is monochromatic due to lack of atmospheric interference such as clouds and smog.

2. Attention to detail adds scope and dimension to your vacation pictures. Here, the brightly colored tin roof of a typical church steeple is pictured against a pure blue tropical sky.

3. Traditional Tahitian dancer performing under partial enclosure was photographed with a Konica C35AF autofocus camera with built-in flash. Exposure without flash would have been impossible because of outdoor backlighting; focusing would have been equally difficult. The camera took over in both departments.

4. The clear air of the tropics and the clarity of Kodak Kodachrome 25 Film combine to produce the almost posterlike colors of this Tahitian scenic. Polarizer was used to reduce the reflections of the grass.

5. Soon after I made this exposure of a peaceful lagoon in Moorea, I was crawling under the Land Rover looking for parts from the shutter-cocking mechanism of my camera. I learned my lesson: It's a good idea to protect your cameras and lenses from dust and vibration when travelling.

6. Diverse groups of tropical flowers profusely dot the landscape. Don't just move in and shoot, use a little imagination. Palm fronds create an unusual background for these orchids.

7. Real people doing real things make authentic and interesting tropical vacation pictures. Here, a Tahitian rowing club prepares to practice in traditional racing canoe.

8. Outdated GAF 500 Slide Film was used to alter sky tones after sunset. Sailboat provides a frame and reference for an otherwise average shot of the sky.

9. The details of a place not only enhance your pictures but enhance your enjoyment of your trip in future years. Shown here, traditional Tahitian fabrics sit uncut in bolts waiting to be purchased.

10. The light of midday is often very contrasty. Here a homemade soft-focus filter was used to cut contrast. An aperture of f/11 guaranteed the image would still be sharp. See text for more details.

Unless otherwise noted, all photos were made with Nikon F cameras, 35mm, 100mm macro, 500mm mirror and 50-300mm zoom Nikkor lenses and Kodachrome 25 film.



ALL PHOTOS BY THE AUTHOR

then letting it cool off in an airtight container.

About now you're probably wondering, "What's all the fuss about moisture?" The reason tropical photographers are so deathly afraid of excess moisture is that in the tropics airborne fungus spores are literally everywhere. These varied types of fungus feed on dead organic matter such as wood, paper, gelatin and leather but can also damage glass.

If you have never seen a negative or print suffering from fungus growth, I can assure you it is not a pretty sight. The effect is much like terminal acne and is usually irreversible once the damage is done. For this reason, exposed film should be processed as soon as possible after exposure and then lacquered (most film lacquers contain protective fungicides).

When emerging from indoors to the steamy tropical outdoors, condensation will develop on all exposed glass surfaces. The 500mm mirror lens used to take the shot has fogged up, creating a scene that looks like it was made in pea soup.

Similarly, cameras and lenses should be adequately protected while visiting the tropics. Metal surfaces should be lightly greased to prevent corrosion, and leather surfaces should be treated with a light coat of wax polish. Lenses should be cleaned with a very soft brush to prevent scratching, and capped front and back when they're not in use.

The best protection for film and cameras is an air-conditioned room that will keep materials cool and dry. Unfortunately, very few beautiful pictures can be made when your film and cameras are in an air-conditioned hotel room. In addition, when going from a cool, dry room to the hot, steamy out-

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Don't wait another minute — hurry in to your Nikon dealer now. Choose the new Nikkor lenses you've always wanted, make your best deal, and make your purchase by May 31, 1979. We'll rush your rebate check directly to you. Don't miss this once-in-a-lifetime opportunity to own the finest of all lenses at the biggest savings ever!

Offer extended only through participating Nikon dealers in the United States, Puerto Rico and U.S. Virgin Islands on designated new Nikkor lenses with official Nikon Registration for One-Year Limited Worldwide Warranty (Part 2A), imported and sold by EPOI and purchased and delivered to a retail customer between February 1 and May 31, 1979. Offer void where prohibited, taxed, or restricted by law. For complete details, visit your Nikon dealer, Nikon Inc., Garden City, New York 11530. Subsidiary of Ehrenreich Photo-Optical Industries, Inc. 

ELIGIBLE NIKKOR LENSES		
Product No.	Description	Rebate
Wide Angle	1113 18mm f4 AI	\$50
	1114 20mm f3.5 AI or f4 AI	\$35
	1117 24mm f2 AI	\$50
	1116 24mm f2.8 AI	\$30
	1119 28mm f2 AI	\$50
	1120 28mm f2.8 AI	\$40
	1121 28mm f3.5 AI	\$30
	1129 35mm f1.4 AI	\$50
	1128 35mm f2 AI	\$30
Telephoto	1127 35mm f2.8 AI	\$25
	1151 85mm f2 AI	\$35
	1156 105mm f2.5 AI	\$40
	1159 135mm f2 AI	\$100
	1162 135mm f2.8 AI	\$40
	1160 135mm f3.5 AI	\$30
	1167 200mm f4 AI	\$40
	970 400mm f4.5 Tele	\$100
	950 500mm f8 Reflex	\$75
Special	952 1000mm f11 Reflex	\$150
	1022 28mm f4 PC	\$50
	1026 35mm f2.8 PC	\$40
	1140 55mm f3.5 Micro AI	\$25
	1154 105mm f4 Micro AI	\$50
	980 200mm f5.6 Medical AC	\$150
	981 200mm f5.6 Medical DC	\$150
	1139 58mm f1.2 Noct AI	\$75
Zoom	1180 28-45mm f4.5 Zoom AI	\$75
	1178 35-70mm f3.5 Zoom AI	\$75
	1181 43-86mm f3.5 Zoom AI	\$40
	1182 50-300mm f4.5 Zoom AI	\$100
	1184 80-200mm f4.5 Zoom AI	\$75
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**UP-TO-\$150
CASH REBATES ON
33 NIKKOR LENSES
EXTENDED TO MAY 31, 1979**



DAMN THE COMPROMISES... MAKE THE BEST PRINTS IN THE WORLD.

Until recently you had to compromise with an enlarger if you wanted to do both black and white and color printing. Why? Consider two facts of life.

1. Most enlargers were designed for black and white printing. When amateur color printing came along, manufacturers added a filter drawer to their conventional condenser enlargers to accommodate color printing. But this compromise didn't satisfy the photographers who were mainly interested in making color prints.

2. In an attempt to simplify color printing, integrating diffusion heads with built-in filters were devised, but they require the removal of condensers. Without condensers, black and white print quality suffers. And color

printing times may be quite long, allowing excessive heat build up at the negative and leaving print quality at the mercy of transient vibrations.

All of the above was very much in mind during the development of the Vivitar VI™ enlarger. It was designed from the beginning to eliminate the necessity for compromises in both black and white and color printing. Of course it's a condenser enlarger, because any experienced darkroom man knows condensers make sharper prints.

The Vivitar VI is a big, rigid, no-nonsense enlarger that handles like pro-lab equipment. The head glides up and down the girder-like box beam column on ball bearing rollers. Constant force counter-balance

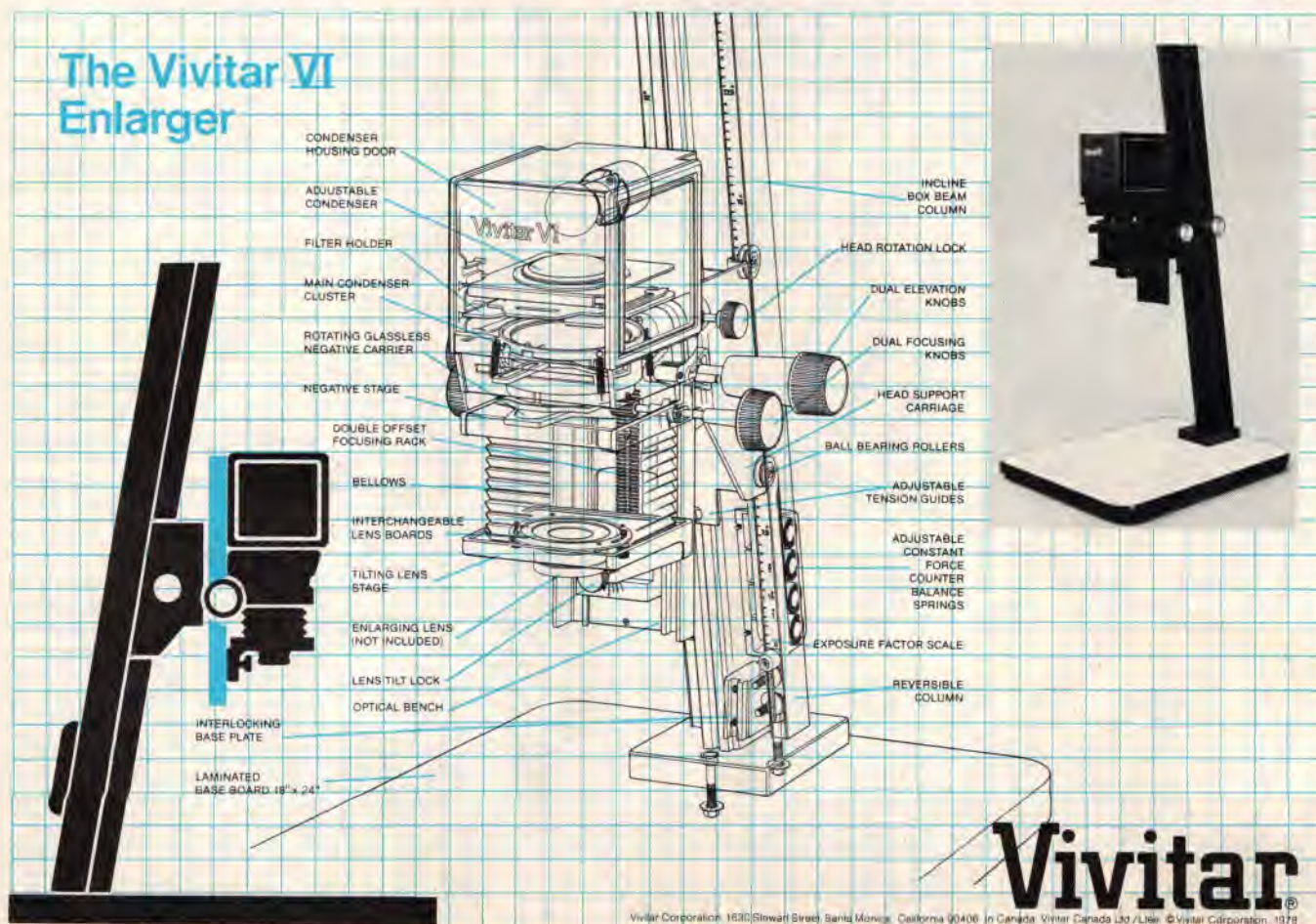
springs equalize inertia at all points on the column. There's no slippage, no backlash. Southpaws will appreciate the ambidextrous design... it has both right and left hand focusing and elevation controls. All the optical components are aligned on a heavy column of their own, like a vertical optical bench. The XL column is standard as is the oversized baseboard which allows 16" x 20" prints from 35mm format, two features considered optional extras on some enlargers.

The Vivitar VI will satisfy the most exacting black and white printers including compulsive dodgers and burners and zone system perfectionists. If the bulk of your work is black and white but you occasionally try your hand at color, you can

use an inexpensive color filter pack and get the crisp, saturated color prints only a condenser enlarger can produce. If you find yourself working more with color, you'll want Vivitar's Dioptic™ Light Source. Unique technology makes it the most sophisticated color head you can buy... it's no exaggeration to call it the color head of the future. Check it out for yourself at your Vivitar dealer.

But remember that the Dioptic Light Source can be used only with the Vivitar VI enlarger, so make sure you buy the only enlarger that can grow from a perfectionist's black and white model to an equally high-quality color unit.

Black and White and color, damn the compromises. Full speed ahead.



Tropical Photography

doors, you will encounter condensation like you've never seen. The photo on page 48 was made under these conditions. Although it appears as if the sailboat was photographed in dense fog, the sun was actually shining brightly. The 500mm mirror lens used to take the photo was fogged up for fully 20 minutes after emerging from my cool hotel room.

If you do much traveling around in the islands, you will probably be using open-air transportation (in many islands as well as Tahiti). Jeeps and open-air buses are the order of the day. You should use some padding under the camera and at least a towel over the camera to protect it from dust and vibration. On one occasion in Tahiti, we had been driving down the same windy road for about an hour in our Land Rover. When I stopped to take a shot of a majestic lagoon and reached down for my camera, I found a large brown clump of dirt vaguely resembling my camera. After brushing off the lens I made an exposure and cocked the shutter, at which point the entire shutter-cocking mechanism popped off into the road. After crawling around the side of the road for several minutes, I found all the clips and springs and screws—I think. Anyway, I threw the whole mess into a plastic bag and waited 'til nightfall to attempt repairs.

NEARLY DEPARTED

This is a good place to digress for a moment to talk about airports and air travel. When navigating the security check points, always ask for a hand inspection of film and cameras. That way, you'll waste no time worrying about X-ray damage.

Once aboard, you will be made to store your carry-on luggage under the seat—a genuinely good idea for the control of on-board flying objects. However, regarding cameras and lenses, the amount of vibration transmitted through the floor of the plane, particularly on takeoff and landing, is more than enough to loosen or dislodge tiny camera screws. You can reduce the vibration somewhat by putting a blanket under the camera bag or by lining the bottom of the bag itself with foam rubber.

Once away, you may want to take a few shots from the plane windows. I always try to get on board first and scout out a good seat with a clean, unscratched window in front of a wing.



ALL PHOTOS BY THE AUTHOR.



1. Unposed pictures of people at work in a natural environment will add dimension to your trip and authenticity to your pictures. A Tahitian father and son prepare to fish the lagoon in front of their home.

2. Making friends is by far the best way to put people at ease. Here a friend, Alice, and her baby sister exhibit the far-off pensive gaze of the local Tahitians.

have eliminated many of the uninteresting scenes that all of us at one time or another have photographed. By scripting the day's photographic activities you will also have increased your familiarity with the place, thus enhancing your experience.

The most fabled of tropical pictures is the sunset—and for good reason. Tropical sunsets are rich and spectacular. However, there are a few things that are quite interesting about tropical sunsets. For instance, the closer you are to the equator, the faster the sun sets as it nears the horizon. It is almost as if the sun were a big balloon that someone sticks with a pin just as it is about to set. It drops right out of the sky. What this means is that you must prepare the photograph and work quickly once the sun has worked itself into a desirable position.

Since there is no smog in tropical climates, the sunsets are usually void of the varied colors found along our polluted shores. However, although they may be less varied, tropical sunsets are no less intense. Also be aware of the colors in the sky up to 30 minutes past sunset, for these can be even more dramatic than the sunset itself.

Look for points of interest native to the environment to shoot through or frame around. Using the form (i.e., silhouette) rather than the texture of the object pictured against the colored sky lends meaning as well as increased

If you are seated behind a wing, the jet trail will severely impair your aerial images unless the engines are mounted on the plane's tail. I like to use a 35mm lens, get close to (but not touching) the glass, and fire away with a shutter speed of 1/250 second or shorter. You can get some gorgeous aerials this way provided you are not too high (altitude-wise) and provided there is good visibility.

TROPICAL TIPS

To get the most from your tropical vacation pictures you should have a clear idea of what you want to photograph. As when writing an essay, you should break the island down into specific areas of interest like flora or fauna, beautiful women or children, etc. By combining a definite plan of action with a readiness and an alertness to photograph any new situation, you will



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WHEN YOUR IMAGE MUST BE THE BEST

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Tropical Photography

perspective to the sunset photograph.

When shooting tropical scenics, try to avoid the unflattering overhead light of midday. The light from around 10:00 a.m. to 3:00 p.m. is overhead lighting and mostly undesirable for picture taking. Morning and late afternoon light is crisp, angular light that defines and models your subject and, depending on how early or late you are shooting, is tinged with the golden tones of the sun. If you must shoot in the middle of the day, use a polarizing filter. This will help a great deal by misdirecting the reflected light to accent or deemphasize the desired tone (i.e., sky, sand, foliage, etc.).

Another photographic trick that will greatly enhance your scenics is to use a foreground object to show perspective. Use a sailboat to offset a tropical shoreline; include the craggy rocks in the foreground to enhance a mountain photo. The secret in shooting good scenics, whether you are in the tropics or Antarctica, is to notice details and then carefully incorporate them into your composition. If no interesting foreground subject matter is present, use your travel partner doing something interesting.

This type of photograph is particularly effective when using a wide-angle lens. Since a wide-angle has more inherent depth of field, you can keep those attractive foreground subjects in sharp focus without stopping down a great deal. This is undoubtedly why my "normal" lens has become a 35mm. The wide angle will also enhance a composition almost instantly by its unique stretching effect.

EXPOSURE

Because the sun achieves a much higher elevation in the tropics than elsewhere, the light is extremely intense. In addition, the elements of a clear, unpolluted atmosphere and cloudless sky increase brightness and, more important, contrast (the disparity between a black and a white tone). For this reason, a majority of the photos you see taken in the tropics are underexposed—even photos taken by professionals suffer. Even when a proper exposure is indicated by the meter, the increased tropical contrast may exceed the limits of the film, and shadows will lack detail. In black-and-white photography you can compensate by increasing exposure to get more shadow detail and then cutting back on development to reduce high-light density. With color film, particular-

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ly the slower, higher contrast films, about the only thing you can do is use some type of diffusion material in front of the lens to cut contrast. If, however, you have spent a rare fortune on your ultra-tack-sharp lens, you may not think degrading its sharpness with a 10-cent piece of gauze is too amusing.

When you're in the tropics, it is a wise idea to carry an extra meter, preferably a handheld incident meter, to double-check your camera's meter. With the excessive tropical brightness (and hence, reflectance) the in-camera meter is easily fooled. Kodak recommends that you periodically refer to the information sheet packaged with the film, or remember the handy "reasonable exposure rule." For instance, ask yourself if the exposure you are using is reasonable. A reasonable exposure for a sunny day under normal conditions is 1/ASA at f/16. If the ASA is 25, exposure would be 1/25 at f/16. If the film speed is ASA 400, a reasonable exposure would be 1/400 at f/16. If your exposures are not in the ballpark, stop and check; something's obviously wrong.

PHOTOGRAPHING PEOPLE

Photographing the native inhabitants of the tropics can be at times the easiest of chores and at other times a most difficult task. Often your clothing or behavior is foreign to them and thus sparks a natural curiosity that will allow easy communication. Other times, photographers before you have created such a feeling of ill will that the people will get downright hostile if you try to photograph them. This is the case in Tahiti, where countless numbers of tourists have for years prevailed upon the good nature of the attractive Tahitian women.

You must also be familiar with the cultural mores of the native people. In parts of Southeast Asia, for instance, the people believe if a picture of them is taken, part of their spirit is also taken. Needless to say, photographers in that part of the world are not highly revered.

But when you are where you can easily photograph the people, there are a few tips that may prove helpful. When it is possible to photograph the people candidly at work or in the context of their own environment, by all means do so. Your pictures will be much more authentic if they are of real people doing real things. However, if it is impossible to penetrate their world unobtrusively, use courtesy, discretion and whatever portion of the native language you speak to arrange for a



1. A typical tin of desiccant is shown here. The center portion of the cylinder is exposed and will change color when the substance ceases to absorb moisture.

2. The best way to carry your film in the tropics is in an airtight resealable container with desiccant enclosed. Film should be kept in its original package until exposed and then returned immediately to its plastic can.

3. Homemade soft-focus filter is a great (and cheap) way to control the excessive contrast of the tropics. To make the filter, buy a retaining ring for your lens filter size and a little black stocking material. Cut holes to the desired pattern for the desired softness.

4. Tahitian child hunts for small fish with his bare hands—a form of play as well as training. Noticing the details of life will greatly enhance the meaning of your travel photos.

posed photograph. Have the person do something natural, not gawk at the camera.

When you want to take candid shots in public, wear dark, bland clothes that will allow you to move unnoticed through crowds. Use a friend for a focusing shield or aim the camera away from the scene you want to photograph and use your other eye (the eye not looking through the camera) to view the scene. As the action develops to the desired point, shift the camera back to the scene and fire away. Although this might appear sneaky to some, at times it is the only way to get a natural photograph.

People are the same in many respects all over the world. I found the Tahitian people's attitude toward their children is much the same as ours in America. Photographing the children, or the very old as well, is usually permissible and will often open up doors of friendship.

Whether photographing people or scenics, you will do yourself a favor by slowing down to a tropical pace. Many would argue that that is close to being

asleep, but while driving around the Tahitian island of Huahine, we had an interesting experience that changed the remainder of our trip. We had seen many men and women sitting motionless and alone on the beach staring out to sea. They appeared almost catatonic. While we drove faster and faster to try and see and photograph all, we were completely missing the point. We were not really seeing or enjoying anything. It was necessary to deprogram ourselves from the 9:00-to-5:00 freeway free-for-all mentality and slow to the luxuriously slow pace of Tahiti. Once this was done, the best and most meaningful photographs of the trip lay ahead.

The tropics are an intensely beautiful portion of the world to visit. Tiny tropical isles with personalities all their own are teeming with life just waiting to be photographed and enjoyed. Spend a little time preparing for the tropics, take special care with your photography, and the pictures you take home will become an immense source of joy in years to come. □

Photographic's SPEC SHEET

LENS: Soligor 70-160mm
Zoom & Macro



ANGLE OF VIEW: 34° to 16°
NUMBER OF ELEMENTS: 12 elements in 9 groups
ACCESSORY SIZE: 55mm
APERTURE RANGE: f/3.5 to f/22
FOCUSING RANGE: Normal mode, 5 feet (1.5m) to infinity; macro mode, 5.2 in. (12.5 cm) to 5 feet
CLOSE-FOCUS MAGNIFICATION: 1:3
DEPTH-OF-FIELD SCALE: No
INFRARED FOCUSING MARK: Yes
LENS COATING: Multicoated
WEIGHT: 22.4 oz. (640g)
FINISH: Black
LENGTH FROM FRONT TO FLANGE, AT INFINITY: 5.5 in. (136mm)
MAXIMUM BARREL DIAMETER: 2.6 in. (66mm)
CLICK STOPS: Half-stop detents
ROTATION DIRECTION FROM INFINITY TO CLOSE-UP, IN USE: Clockwise
BUILT-IN LENS HOOD: Yes
SPECIAL FEATURES: One-touch operation
MOUNTS AVAILABLE: Canon FD, Konica EE, Minolta MD, Nikon AI, Olympus OM, Pentax K, Pentax/Universal and Yashica/Contax (availability to be announced)
PRICE: \$360 with front and rear lens caps

LENS: Soligor 300mm
Compact "G"



ANGLE OF VIEW: 8°
NUMBER OF ELEMENTS: 5 elements in 5 groups
ACCESSORY SIZE: 72mm
APERTURE RANGE: f/4.5 to f/22
FOCUSING RANGE: 13 feet (4m) to infinity
DEPTH-OF-FIELD SCALE: Yes
INFRARED FOCUSING MARK: Yes
LENS COATING: Multicoated
WEIGHT: 26 oz. (740g)
FINISH: Black
LENGTH FROM FRONT TO FLANGE, AT INFINITY: 6.56 in. (164mm)
MAXIMUM BARREL DIAMETER: 3.12 in. (78mm)
CLICK STOPS: Full-stop detents
ROTATION DIRECTION FROM INFINITY TO CLOSE-UP, IN USE: Clockwise
BUILT-IN LENS HOOD: Yes
SPECIAL FEATURES: None
MOUNTS AVAILABLE: Canon FD, Konica EE, Minolta MD, Nikon AI, Olympus OM, Pentax K, Pentax/Universal and Yashica/Contax (availability to be announced)
PRICE: \$279 with front and rear lens caps

LENS: Soligor CD 70-222mm
Zoom & Macro



ANGLE OF VIEW: 34° to 10°
NUMBER OF ELEMENTS: 13 elements in 9 groups
ACCESSORY SIZE: 67mm
APERTURE RANGE: f/3.5 to f/22
FOCUSING RANGE: Normal mode, 5 feet (1.5m) to infinity; macro mode, 1.5 inches (3.8cm) to 5 feet
CLOSE-FOCUS MAGNIFICATION: 1:1.6
DEPTH-OF-FIELD SCALE: No
INFRARED FOCUSING MARK: Yes
LENS COATING: Multicoated
WEIGHT: 40 oz. (1150g)
FINISH: Black
LENGTH FROM FRONT TO FLANGE, AT INFINITY: 7.3 in. (184mm)
MAXIMUM BARREL DIAMETER: 3.2 in. (80mm)
CLICK STOPS: Full-stop detents
ROTATION DIRECTION FROM INFINITY TO CLOSE-UP, IN USE: Clockwise
BUILT-IN LENS HOOD: Yes
SPECIAL FEATURES: One-touch operation
MOUNTS AVAILABLE: Canon FD, Konica EE, Minolta MD, Nikon AI, Olympus OM, Pentax K, Pentax/Universal and Yashica/Contax (availability to be announced)
PRICE: \$559 with case, front and rear lens caps

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body is only the beginning of a photo system with 30 Hexanon lenses and over 100 Konica Autoreflex accessories. See the TC or the more advanced motorized Konica T4, at your Konica dealer, or write for full details to: Dept. 8035, Konica Camera Co. Woodside, N.Y. 11377. Burbank, CA. 91506.



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1



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3



6



7

PORTRAITS OF FOREIGN PLACES

HOW TO PERSONALIZE YOUR TRAVEL PICTURES

BY PEGGY SEALFON

I'm one of those photo travelers with an insatiable curiosity. I adore exploring foreign places. But I abhor strictly guided tours. I never want to hear myself say, "If it's Tuesday, this must be Belgium." In my photography, I want to get to "know" a place, to reach beyond the surface of tourist attractions and hotels.

Photography allows me the luxury of seeing a country in a unique way. It gives me a sense of security—albeit a false one. For like a magic charm, a camera makes me feel safe as if it could protect me against any danger when I wander off the beaten path. And I do wander.

I strive to capture some of the uniqueness of a country I'm visiting, and usually it's found beyond the "usual" sites. My aim is to photograph

1. Details, especially of foods, provide a flavorful glimpse of another aspect of a foreign culture. This shot was taken at the Hotel du Forum in Arles, France, and portrays my favorite meal, *le petit déjeuner*.

2. One particular sight that struck me every time I strolled through the streets of Arles in southern France was laundry always hanging out to dry and the flowers bedecking the window sills. I combined these elements with a view of the stone houses that lined the narrow street to capture the feeling of a typical Arlesian *quartier*.

3. Had I not spent time exploring the back roads of Marbella, I never would have met this friendly Spanish family and gotten this warm and candid portrait.

4. Even in travels around the United States, I like to find images that will help me to recall the specific places I've been and remind me of my travels. Taken in Bear Mountain, this image of the Southfields train station provides perfect identification.

5. An old Spanish seafarer who I'd met at a local cafe along the Costa del Sol told me about this lovely little street sequestered in the hills, that most tourists do not see.

6. Personal documentary images can provide interesting and informative observations of foreign lifestyles as in this shot of *Le Boucherie* in Arles, France. It also happened to be the view from my hotel window.

7. To capture an overall sense of Nice on the French Riviera, I combined a general view of the expansive resortscape with a floral arrangement I designed to represent the area's huge cut-flower industry. The view is an extremely personal one as it was from my hotel room terrace.



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On the other hand, even the best chemistry in the world won't give you the results you want without a color processor that lets you keep complete control over the temperature of your solution and critical agitation. For that part of the perfect color print, there's the Paterson Thermodrum.

The Thermodrum has a water bath that will keep a critical temperature steady for up to 15 minutes (about 5 times longer than you actually need to process a good color print).

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Clearly, control is just as important as high quality chemistry. And the surest way to get the best color print is to get the best of both.

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FOREIGN PLACES

the essence of a country's cultures, customs, landscapes, and the little things I notice. The result I'm after is a singular portrait of the places I visit. The photographs from each trip comprise an expressive travelogue that reflects my travels, my insights and experiences. I figure if I merely wanted postcard pictures of Puerto Vallarta, I'd buy them. I don't need to carry them home from my Mexican trip on exposed rolls of film.

I'd like to share some of my techniques with you so that you might be inspired by my enthusiasm for making personalized travel photographs. If you're traveling far, I envy you; if you're staying closer to home, these techniques will be just as valid—I guarantee it!

EQUIPMENT

The first question anyone asks is what equipment to take. I always answer that I bring "as little as I can get away with." I put great emphasis on traveling light, including both photographic and personal equipment. I have to carry it and I don't want to spend my trip crippled by aching tired muscles.

With the reduced fares these days, travel by plane to faraway places is super accessible and thus my usual mode of transportation. I pack a suitcase that fits under my allotted airline seat space (which varies from airline to airline but is roughly 17 x 15 x 8 inches). I also carry on a roomy shoulder/camera bag. If any item refuses to fit in either bag, it gets left home. Not having to worry about checking luggage is a joy. I don't waste valuable time waiting to claim bags or, worse yet, going through the horrors of losing any. Of course, I'm forced to pack scientifically and to discriminate about items I'll take along. But I've never been sorry. And I've had to draw appropriate attire—and equipment—out of my Pandora's travel box for such things as a formal reception by the mayor of Göteborg, Sweden, and a stomp through the floral fields of Opio for a photo story on the perfume industry in southern France.

I recommend packing your gear with easy access in mind. I use a Lark suitcase, which has three basic compartments. The two on the outside hold my clothing, and the spacious center is great for odd-sized objects; shoes, cosmetics and equipment. I pack a cassette tape recorder and tapes (for interviews, verbal notes, etc.), lots of

film, a 35mm single-lens reflex camera body and a lens. Usually these photo items will not be needed during transit, but they're accessible for customs inspection or easy removal for hand-checking at airport X-ray machine sites.

Be sure to register equipment with U.S. customs at the airport before departure if you're leaving the country. (For a complete discussion of customs procedures, see "Be the Well-Prepared Traveler," page 65.) To save time in filling out the "Certificate of Registration" form, I have a ready list of each item and serial number. I keep a carbon of the list on file at home.

The Lark zippers for each section have tiny locks, which I secure as a deterrent to would-be thieves (and the minute key is tucked into a pouch worn within easy reach around my neck). While I'm staying at a hotel, the equipment I don't take for the day's outing gets locked in that center section. The miniature locks are not serious protection, but they let me feel more comfortable about leaving my gear behind.

My camera bag holds the rest of my equipment plus wallet, passport, plane ticket, etc. I carry another 35mm SLR, several assorted lenses, an electronic flash, and a small, inexpensive rangefinder for black-and-white shooting. (Although if I had my druthers these days, I'd opt for a versatile compact 110-size SLR such as the ones made by Minolta and Pentax.)

Rather than itemizing here the specific lenses to take, suffice it to say that you should choose optics you're comfortable with and which give you flexibility for a variety of situations. Some travel shooters streamline lens choice by simply taking two zooms that cover focal lengths of 35-70mm and 80-200mm. Certainly it's convenient to have lens coverage from wide-angle to telephoto (and macro), but the specific choices depend on your own shooting style. Whichever lenses you decide to take, make sure all are in good working order. Just as you would perish the painful thought of breaking in a never-worn pair of shoes on a trip, you should never court disaster by taking along a never-used lens or camera. Shoot at least one roll of film and view the results before packing the new gear in your travel bag.

Though you can buy film in most places at hotels and local stores, I prefer to take a handsome supply of my own. Color film is especially vulnerable to color shifting due to age and origin

(e.g., French Kodachrome is quite different tonally from American Kodachrome). Potluck is for gamblers—I prefer sure bets in this area. I like to know the exact characteristics I can expect from my film.

I do not need any kind of motor drive for my work, so I leave that added weight at home. Besides, if I wanted every instant of action, I'd rather take along a movie camera.

As far as accessories, I'd suggest extra batteries, lens cleaning tissue, a variety of filters (to suit your taste), lens hood, and anything else you might need for your picture taking. Professional photographer Elliott Erwitt says a sturdy tripod that can be carried in your suitcase is the best investment. "You'll find that your work is more precise," says Erwitt. "Focusing is more critical and camera shake is minimized. And you tend to concentrate more on the composition."

Other photojournalists I know carry along a Polaroid camera especially when documenting exotic cultures. Taking instant pictures and sharing the visual experience with natives immediately establishes communication. As the International Photographic Council (IPC) declares, photography is "the universal language." Indeed, the slogan has been oft proven in these situations for a happy outcome of cooperation and memorable pictures.

PREPARATION

My approach to travel photography requires advance groundwork. I learn as much as possible about the place I'm going to visit before I even pack my bags.

Tour books are OK for starters. They give the generalities about a place and authors' recommendations on places to stay and visit. Next, the public library is a terrific source. I often rely on the *Readers' Guide to Periodical Literature* for a multitude of magazine articles written about the place where I'm planning to go. Also, about two months before I'm going to leave, I start reading novels that are set in that country to get a better understanding of the atmosphere—even in fictionalized form! In addition, tourist agencies and government tourist bureaus/embassies provide a plethora of pictorial brochures and literature.

I do one final bit of homework prior to embarking on a foreign journey: I learn some of the native language. Several weeks before SAS airlines swept me away to Sweden, I borrowed a Swedish language record from the library. Every day for an hour, I'd listen

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white papers



FOREIGN PLACES

and learn. In Stockholm when Lennart Nilsson introduced me to his assistant, I took his hand and uttered such an admirable Swedish greeting that the young man began speaking in fluent Swedish. It didn't matter that he had to immediately switch to English when he realized I did not understand. The point is that knowing even a few words is an appreciated gesture and a door-opener in many instances.

If you are fluent in a language, so much the better. I happen to be an incurable francophile and speak French quite easily. On a visit to Arles, a Provençal city in the south of France, I ambled into a secluded *quartier* and happened upon two elderly women chatting away on the hot afternoon street. I casually joined their conversation and established a rapport over several hours before I took even one photograph. Eventually, I was invited into their homes and able to observe—and photograph—beyond the facade of the Arlesian street scene.

But if language is a problem, a friendly attitude truly helps. As you well know, there's lots of communication that goes on nonverbally, so be sure your nonverbal signals are positive, amicable ones.

ON ARRIVAL

Information seeker that I am, my researching does not stop after I land at my destination. Regional newspapers and entertainment-type magazines are marvelous sources for finding out about local happenings. Often special events are not listed in tour brochures because they're not for tourists. Great! That's exactly where I go.

In fact, I try to avoid dining at hotel restaurants in favor of finding local haunts. I can usually discover colorful, interesting people of the area there who fill me in on juicy details about the place and sometimes show me locales I'd never have found on my own. Before beginning any such jaunt, I first buy a comprehensive map of the area and make sure I have a sufficient amount of local currency (I make monetary transactions at a local bank for better exchange rates than are available at hotels).

Naturally, if you try my route, you must exercise caution. I let instinct be my guide, and so far I've been lucky. I would never wander off with a local person to some godforsaken place unless (a) I'm with another strong, fearless person, (b) I have my rusty karate in shape and someone knows where



8, 9. Uncommon pictures of a common tourist site in Paris, France: the Eiffel Tower as seen from a private vantage point from a distant park, and a detailed closeup for a totally different effect.

I've gone, (c) I follow, driving my own vehicle. Obviously, use common sense.

Another alternative altogether is to ask hotel clerks for interesting areas, events, and—if you're concerned—ask about the safety element.

SHOOTING TIPS

Be Familiar with the Locale

If you've done all your homework, by the time you arrive you should already have a "feeling" about the region, an idea of noteworthy spots you want to see, and a general sense about the people. If you don't, start by taking a general sightseeing tour *sans* camera. I don't think anyone can concentrate on taking pictures and sightsee at the same time. Tour-bus grab shots hardly offer any view of the land. Spend time getting familiar with the atmosphere, the sights. Make notes of locations you'd like to return to for explorative pictures and write down your observations about details. Note things that strike you about the place.

Set aside time specifically for picture-taking. Early morning and late afternoon light is usually the most dramatic, so do your swimming, shopping, etc., during midday.

And rather than risk not catching a fleeting moment or expression, I over-shoot. I'd rather edit thousands of slides later than miss the one that I wanted. Film is cheaper than a return



ALL PHOTOS BY THE AUTHOR.

flight, hotel, meals. But that does not mean I shoot indiscriminately. I still compose carefully and take my time.

Make Notes—Visual and Otherwise

It's a good idea to keep records of what you shoot so that later you don't rack your brain over where a shot was taken. A tape recorder can provide one way of taking notes. Some travelers even use it to record local sounds, music, etc., and synchronize tapes with their slide shows to add another dimension to travel pictures at home.

I carry a notepad and write a lot about feelings and experiences, but for factual information about places I make visual notes in pictures. Though many of these pictures are essentially identification shots, I try to make them interesting images as well. An in-flight picture of a glass of wine recalls my sunny return trip from Stockholm with SAS and provides a graphic closing shot for a slide show. Another example: While having a hot *café crème* during a rainy winter's afternoon on Paris' Left Bank, I recorded the essence of the moment both inside and out and placed the menu in view with the name "Le Relais Odeon" as a reminder of the exact locale. Even the photograph taken on a back road of Marbella of a cluster of Spanish kids with Mom and Grandma has a hidden clue of identification in the just-visible lettering on the street sewer covers (photo No. 3).

Sometimes, however, I'll resort to photographing a street sign just as a

record. During my winter stay in Paris, I took a portrait of a typical Frenchman walking his dog (a typical French exercise—the French are notorious dog owners). He was hurrying across one of the Seine's many bridges, and I loved the contrast of man and dog against the hazy Parisian backdrop. But I knew I'd never remember where I'd taken the image, so on the next frame I exposed the sign "Pont Royal."

I seek images that not only encapsulate something about the country/city I'm visiting but about my experiences there. While relaxing at the Hotel de Paris on several late summery afternoons, I watched street scenes unfolding beneath my window. The photograph of the *boucherie* is not only a slice of French life, but a memoir of the view from my hotel room (see photo No. 6).

Look for Meaningful Details

Details are extremely important and communicate a great deal about a place, too. A detail of cheeses on display represents a staple of French cuisine—as abundant as wine and bread—and offers an informative look at French names and prices. For me, the image also serves as a reminder of a delicious place I was introduced to by a friend living in Chamonix.

Details also characterize a moment. While getting an early start one morning before launching into the hectic activities at the International Photography Meeting last year in Arles, I suddenly noticed the exquisite light falling on my *petit déjeuner*. I quickly made a detailed record of this meal, *vraiment français*, and the extremely personal point of time (photo No. 1).

As you concentrate on meaningful incidents and characteristic details during your travels, you'll find that not only is your trip enhanced, but you'll return with a richer cache of photographs. As a group, the photos will form a picture story about the place you visited as well as your personal responses to it. And in our present age of economy consciousness, why not create dual-purpose pictures?

In fact, multifaceted photographs slip far more readily into home slide shows and actually stimulate and subtly educate your viewing friends, rather than bore them to tears with repetitious images of famous monuments. And if you are motivated to sell your pictures, Larry Fried of Image Bank—a prestigious New York stock photo house—once said that salable pictures are those which represent more than just the fact that the photographer stood in that

spot. They must be more than just "snapshots."

PHOTOGRAPHING MONUMENTS

In a city like Paris, how can you not go and stand in front of the Eiffel Tower, Sacre Coeur or Notre Dame? The trick is not to merely see them casually, but see them from a private vantage point. Look for different angles. Experiment shooting from varied locations. Especially when strolling off the beaten path in a place like *gai* Paris, keep an eye open for unusual viewpoints of the ubiquitous monuments.

I like to make uncommon pictures of common structures. That way I have records that signal, yes, I was there, but I also have novel images. I was loafing in a Parisian park when I spotted the Eiffel Tower looming in the distance. I was able to create an amusing photograph by juxtaposing the metal-laced tower with spindly-branched trees (photo No. 8). The perspective of both man-made and nature-made forms make them appear of similar size, and thus the bizarre urban attraction becomes an integral part of a park scene. In another rendition of the Tower, I made a close-up abstraction for a different effect (photo No. 9).

PHOTOGRAPHING PEOPLE

People are the most exciting part of being in a foreign country. However, I unfortunately suffer from an acute malady that successful travel photographer Lisl Dennis calls "inertia." In her book *How to Take Great Travel Photographs* (H.P. Books, Tuscon, Arizona), she discusses ways of overcoming this negative force.

In my case, inertia stems from a hesitancy to impose my lens optics into someone's face for fear of a negative confrontation. I'm never quite sure of being able to build a photo rapport or of being able to cope with rebuttal. Dennis suggests easing into a strange situation by photographing children. Kids are wonderfully receptive to having their pictures taken. And Lisl has found "that first good shot" of the day "boosts the morale." Though she's an accomplished photographer, Lisl still feels she has to break the ice in each new environment by taking the first people picture of the day. "People photography is a bit like a ballet. You have to practice every day if you want to stay limber."

It is important to maintain an open attitude, a readiness for any human interaction. Again, as Dennis supports, "Body language is your vernacular." The way you dress is also a contributing factor. Your clothing, especially in

a foreign culture, can make a difference in how people respond to you and in your own self-assurance in a situation. "Self-consciousness about being a conspicuous foreigner may prevent you from penetrating the niches and crannies of a place," says Lisl, and may cause you "extreme reluctance to approach anyone photographically." She suggests, "Knowing what to wear should become intuitive, largely dictated by the sophistication level of the people you're going to photograph." In a Haitian marketplace, for instance, she advises wearing casual, natural fiber cottons of a low-key color so that your clothes' colors and textures blend with the locals'—so that you can more easily "become more indigenous in spirit, not feeling so conspicuously foreign."

When approaching a person you'd like to photograph, initiate greetings. Obviously those few foreign words you've learned can help here, along with a pantomime gesture asking if you may take a photograph. People appreciate being asked and are usually pleased and flattered. But if someone is adamantly opposed, *do not take a photograph*. Respect that individual's privacy and feelings. A photographer can ruin a trip for himself—and for future photographers visiting that village—by being a sneaky, predatory snaphooter. And his lack of sensitivity will be obvious in the resulting photos. Finally, Dennis advises, "Never shoot and run!" Thank your subject sincerely for his participation.

I like to add a little enthusiasm for the privilege of the experience, and I obtain names and address if possible. As a follow-up thank-you gesture I mail inexpensive copies of the pictures to people who have been gracious enough to let me take their time to pose. (And if I need model releases, in order to sell or publish the images, I'll send along forms for their signatures.) People remember these niceties, and on return visits I've found I always have ready "friends."

The attraction to travel is shared by all. The thrill of being swept from the everyday, normal routine into a whole new world is incomparable. And taking pictures, heightening that experience and carrying it back home on frames of celluloid, is miraculous! Travel and photography are intoxicating, and mind-expanding and personalized photo versions of your travels can be enjoyed again and again.

Now if you'll excuse me . . . I've a plane to catch! □

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Aperture Range: f/3.5–f/22

Construction:

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Coating: Sigma Multi-Layer

Angles of View: 30°–12° Diagonal,

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17°–7° Vertical

Min. Focus: 42 cm (16.5") from front element;

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OR:
HOW I LEARNED TO PLAN AHEAD
FOR SMOOTH SAILING

BY
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TRAVELER

"We are now arriving at Los Angeles International Airport. Los Angeles time is 3:15; the temperature is 76 degrees. Enjoy your stay in Los Angeles."

Bumbling Clyde, our slightly bedraggled but happy traveler, is glad to be home; his three-week vacation in Europe—a warm, almost dreamlike experience—continues to recede in his memory as he begins to think of the many things he must do before he starts back to work on Monday.

It's a good thing, he thinks, that he'll have so many pictures to remind him of his delightful adventures. Too bad about those rolls of film that slipped out of his hand and disappeared into a sewage drain as he was trying to change lenses. Never mind, thinks Clyde, there'll be plenty of other pictures . . . even if the lenses did get drenched those days in Scotland in the rain. There was no way he could tell that there would be so many storms.

"Well, I'm not going to worry about it," says Clyde aloud, although he wonders if he should have bought a camera bag as his friends suggested.

Clyde stands in what seems like an interminable line at the customs depot. Confident that he has declared every item he purchased in Europe, he expects his encounter with officials to be brief and uneventful. He is shocked when the customs officer wants to charge him duty on his German-made camera.

"Well, sure it's new," he tries to explain to the supervisor. "But I bought it here five weeks before I left. I didn't know I was supposed to register valuables." Clyde leaves his camera with the customs official and trudges home to find his purchase receipt.

Like Clyde, many of us have lost pictures and equipment due to negligence and lack of forethought. How to protect our equipment and film from a variety of hazards is something that each of us should think about before we take a trip of any kind—whether it be a weekend retreat to the mountains, a cross-country junket to visit family and friends, an extended camping trip, or a holiday in a foreign country.

Do you know if you have insurance to cover loss and damage to your camera, as well as theft? Do you know how to protect your equipment from climatic extremes and other physical hardships? What restrictions exist on camera equipment in museums and



other tourist attractions? Do you know what the U.S. government expects of you before you leave the country with your valuable equipment, and what to do if you purchase equipment abroad?

Traveling with a camera is one of the joys of owning camera equipment, and planning ahead can greatly enhance your vacation as well as prevent mishaps from occurring.

THINK ABOUT WHAT TO TAKE ALONG

One of your first considerations should be how much you will bring with you. While some people believe in taking everything they own with them on every trip, others disagree.

Sal Hernandez, Supervisor of Photo-

graphic Services at United Airlines, gives passengers a tip. "People should travel as light as possible. Most travelers don't realize that camera equipment will feel very heavy after carrying it around for hours. I always travel light." Hernandez takes his normal lens (which for him is a 50mm) and a 135mm telephoto.

He suggests that when you're choosing the equipment you want to bring with you, ask yourself how many photographs you're likely to take with that particular piece of equipment. Then ask yourself if it's worth carrying around the extra weight for that number of pictures. Hernandez also believes that you sometimes get your



best photos when your equipment is inconspicuous—and that means traveling light.

Something I've found extremely helpful is to pack my camera bag well in advance of my trip. I carry the bag around with me for awhile and ask myself if I'll be comfortable. If I've bought new equipment, I try it out again and again to be sure it works correctly and to be sure I know how to use it *before* I'm off on my adventure. I've known too many people who have spent more time fumbling with equipment than using it simply because it was new to them and they were awkward with it.

Have the name and address of an authorized camera service center with you when you travel. This is especially important if you plan to go abroad. I once spent five hours tracking down someone qualified to repair my camera—and I was in England. Imagine the frustration if you try to find someone where you do not speak the language!

Most camera manufacturers have a listing of authorized service representatives around the world. It's a good idea to carry this list with you even if you're traveling in the United States. If you should need it, it'll save you lots of

time. This list usually comes with a new camera, but if you don't have one, you can get the information by contacting your camera manufacturer.

In general, it is a good idea to do some reading and thinking before you travel. The more prepared you are, the less trouble you're likely to encounter. The bibliography at the end of this article offers good sources of information to help you plan. (Also see "Portraits of Foreign Places," page 56, and "Talking Tech," page 82.)

PROTECT YOUR EQUIPMENT

Weather Protection

Consider the type of trip you'll be taking. There are obvious differences in the conditions your equipment will encounter if you are backpacking in the Grand Canyon, taking an automobile trip to visit Aunt Elsie in Kansas City, visiting New York City in the winter, or Miami Beach in the summer. Do you have to protect your equipment from rain? From the sun? What about dirt and sand?

The greatest problem most of us will encounter is rain or other moisture. All precautions should be taken so that cameras and lenses don't get wet since moisture can cause serious problems. Water droplets on your lenses



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will result in photographs with water spots and blurs, and equipment that gets really wet may develop rust and mildew.

If you're worried about moisture in your equipment, there are several things you can do. One is to *always* carry some form of weather protection for your camera. You never know when clouds are likely to pile up, turn black and yield rain. If you are caught without rain gear, put your camera and lenses under your coat. Wrap your film in plastic bags to prevent moisture from invading the canisters.

It's also a good idea to have a rain shield for your camera. You can buy an inexpensive one or make one from a plastic sandwich bag. Use the bag upside down. To do this, cut off the bottom corners, invert the bag and thread your camera straps through it so that you can pull the bag down over the camera whenever necessary. This offers minimal protection from drizzles and light rain; if you need greater protection, check into the EWA-Marine Flexible Camera Housing by Pioneer & Co. (see page 84). Not only does it waterproof your camera, but because it is airtight, it also protects the camera from sand and dirt. It's great for those of us who particularly like to photograph at the beach, on raft trips, or on dry, dusty hiking trails.

Another way to protect your equipment and film from moisture is to use silica gel. You usually won't need to worry about this type of protection (unless you're traveling to a very humid climate), but it's so simple to use that when I travel to any typically wet place, I just throw a can of it into my camera bag for added protection.

Silica gel is available at well-stocked camera stores and usually comes in small twist-open cans that you can place right inside your camera bag. You may already have some if you've recently purchased new equipment, since manufacturers often toss in a couple of small packets to ward off moisture problems. The gel is inexpensive and can be reused.

Another common problem for travelers, especially hikers, backpackers and bicyclists, is the sun. Most people *don't travel to climates that are hot enough to affect film and equipment adversely*, but always be careful not to set your camera down in a place where the sun will beat on it for an extended period of time. Always try to

protect film and cameras from heat—that means also avoiding the glove compartment of your car since the temperature there can get extremely hot. Instead, if you must leave your equipment, find a sheltered, cool area. This is a perfect example of one reason to bring along only what you can comfortably carry—you can always take it with you. As long as you're carrying your equipment with you, you really don't have to worry too much about the sun. The amount of heat your body can take, your equipment can take.

Photographers interested in traveling into more extreme climates should read "Tropical Photography," page 42 this issue, and "Zen and the Art of Winter Photography," December, 1978 issue.

Protection for Backpackers and Hikers

Backpackers and hikers have additional concerns. Your equipment is not only more vulnerable to the elements, but there is also a greater chance of impact damage. Therefore, selection of a camera bag or camera pack must be made with great care; it should be lightweight, durable and offer adequate protection to your equipment. If you plan well, you can enhance the protec-

tive features of your camera bag by using items of clothing, such as a down jacket or heavy sweater, to help pad your equipment when carrying it in a pack. This not only offers impact protection but also provides insulation and thus cuts down on the heat and cold the camera and film will absorb.

If you are doing a lot of hiking, a sturdy camera harness that prevents your camera from constantly bumping into things (including you) is a good accessory.

For backpackers and hikers, weight is a major concern—the more weight, the more tired you'll get—so be extremely selective in what you take with you. An average single-lens reflex camera ranges in weight from one to 2½ pounds. Lenses can range from seven ounces to well over 24 ounces, depending on the lens. On a recent camping trip, I took my Nikon FE, a light, compact camera, and it made all the difference in the world. So, choose carefully.

If you have questions of any kind related to hiking and backpacking with camera equipment, you can contact your local Sierra Club chapter for advice. It has a camera committee that offers all sorts of help. The Sierra



Club, a national organization, has chapters in every state. These local/regional chapters provide information on trails and local activities as well as advice on how and what to take on your trip. They will also refer you to places that specialize in gear for your particular activity. To find the location of your local chapter, either check your phone directory or write: Sierra Club, 530 Bush Street, San Francisco, California 94108. Another good source of information is your local automobile club office.

Whatever your individual requirements, make sure you have a camera case, bag or harness appropriate to your needs. A manufacturer's list is provided with this article to help direct you to the makers of such important accessories.

Insurance

Do you know that your camera equipment may already be insured? It is—to a limited extent—if you have a renter's or homeowner's insurance policy. Generally, your homeowner's policy assures you of coverage for the contents of your home, even when items are taken outside your home. So, for example, if your camera is stolen from your house or while you are vacationing in Yellowstone National Park or in Paris, you may be equally covered. However, companies differ. Some will cover only 10 percent of the insured contents when they are outside of the home; others will cover 100 percent. Check with your company before you go on your vacation.

There is one option that gives you more complete coverage. Most companies will write *floaters* to accompany your home or renter's insurance. A floater, which varies in price from \$16.50 for the first \$5000 to \$13.10 for \$1000 (or \$1.31 per hundred for the first \$5000), is an attachment to your regular policy in which you specify or *schedule* your equipment and its value. As with your homeowner's policy, fire and theft-incurred casualties are covered, but other casualties are additionally insured. If you drop your camera or somehow get it very wet, for example, you can collect enough to cover repairs. Loss is also covered. This is called "all-risk" coverage. A secondary advantage is that if a disaster occurs, your equipment has already been appraised, saving you the trouble of having to determine its actual worth after the loss.

Take great care to mark all of your equipment with some type of identification. In this way, if in great haste you

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One set of batteries produces up to 2500 flashes...cycling to full power as fast as one second. Two automatic modes, plus manual control with thyristor power saving circuitry. Compact and portable, will cover up to 20 feet! The lower priced A-24 model has the same features except for thyristor circuitry.



ES-30 Pro-Lite "Complete Lighting System"

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TRAVELER

leave something on an airplane or at a booth in a restaurant, there is a great

er chance that you'll recover it.

Sal Hernandez of United Airlines had a nearby jewelry shop etch into his camera body his social security number and driver's license number. As he

puts it, "That way, if it's ever lost or stolen and I need to identify it, it has numbers that belong to me only."

Air Travel—the X-ray Debate

Recently a furor has arisen about the X-ray security machines at airports. Do they damage film or not? Given the intensity of feelings on each side, it is

MUSEUM RESTRICTIONS ON PHOTOGRAPHY

CITY	MUSEUM	HANDHELD CAMERA	TRIPOD	FLASH
Boston	The Institute of Contemporary Art	NA	NA	NA
	Museum of Fine Arts	SP	NA	NA
Chicago	The Art Institute of Chicago	A*	SP**	A*
	Chicago Historical Society	A	A	A
	Museum of Contemporary Art	SP	NA	NA
Detroit and vicinity	Detroit Institute of the Arts	A*,***	A	A—no bulbs
	The Henry Ford Museum (Dearborn)	A	A—must have rubber tips	A
Los Angeles	Henry E. Huntington Gallery (San Marino)	A	NA	NA
	J. Paul Getty Museum (Malibu)	A	NA	NA
	Los Angeles County Museum of Art	A	NA	A
	Norton Simon Museum (Pasadena)	A	NA	NA
New York	Asia House Gallery	SP	SP	SP
	Frick Collection	NA	NA	NA
	Solomon R. Guggenheim	A	NA	NA
	The Jewish Museum	A	SP	NA
	Metropolitan Museum of Art	A***	NA on weekends	NA
	Museum of Modern Art	A	NA	A—elec- tronic only
	United Nations Headquarters	A—only in rooms where there are no meetings	NA	A
Philadelphia	Independence Hall	A	SP	SP
	Philadelphia Museum of Art	A	NA	A—elec- tronic only
	Rodin Museum	A	NA	A—elec- tronic only
San Francisco and vicinity	DeYoung Memorial Museum	A***	SP	NA
	Hearst Castle (San Simeon)	A	NA	NA
	Oakland Museum (Oakland)	A***	SP	SP
Washington D.C.	The Corcoran Gallery of Art	A	SP	SP
	Explorers Hall, National Geographic Society	A	A	A
	Museum of African Art	SP	SP	SP
	National Gallery of Art	A***	SP	A***
	The Smithsonian Institution	A	Tripod and flash are allowed only in the "non-art" museums of the institute	
	The White House	NA	NA	NA

LEGEND

A—allowed

NA—not allowed

SP—special permission required

* You must sign a form guaranteeing that your photographs will not be for commercial use.

** May be used only before and/or after regular museum hours. You must arrange an appointment with the museum beforehand.

***Allowed for permanent collections, but permission must be obtained for use on special exhibits.

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Beverly Hills, California 90212

Hidalgo Supply Company
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Kalt Corp.
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Santa Monica, California 90406

Kuban Hitch
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Minneapolis, Minnesota 55421

Land Industries, Inc.
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Arlington, Virginia 22206

System Bag Co.
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Pleasantville, New York 10570

Tenba Bag
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New York, New York 10012

Ultimate Experience
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Zero/Halliburton
Berkey Marketing Co., Inc.
2520 Brooklyn-Queens
Expressway West
Woodside, New York 11377

important for you to consider the question and make a conscious decision about your film rather than be swept away by whatever is convenient when you arrive at the airport. For a detailed discussion about this, see "One to One," March, 1979 issue.

Briefly, the debate involves the FAA's claim that X-rays from the security machines do not damage film. Challenging this claim are Irwin Diamond, president of SIMA Products Corporation, and the Chicago Area Camera Clubs, who are convinced that X-rays do fog film. Litigation is currently underway, and the matter has not as yet been decided legally. However, I had an experience that helped me make my decision.

I was on my way to the San Francisco Bay area, just about to go through the normal security procedures. A sign was posted above the X-ray unit in which I was to place my camera bag. The sign read:

THIS MACHINE WILL NOT DAMAGE
BLACK-AND-WHITE FILM
COLOR FILM
~~POLAROID FILM~~

I'm glad I wasn't the photographer who discovered that the machine ruined instant film! This episode convinced me that officials have not done enough testing to satisfy me. I don't want to take the chance of fogging any film. It is so simple to prevent this possibility that I have decided to do just that.

SIMA makes lead-lined film-protecting bags—FilmShields—that are convenient to use. All I do is take my film out of the plastic canisters and put the rolls individually into the bag. I keep the film bag at the top of my gadget bag, and when it's my turn at the security clearance area, I just hand the bag and my camera to the clerk, indicating that I want them hand-checked. I leave the bag open so the security officer can look inside easily.

The reason I put my film inside the lead-lined bag is that sometimes I am worried about being late for my plane, and the line is often extremely long at security clearance. When this happens, I seal the bag as indicated in the instructions and let it go through in the regular manner. This also works if you are given any trouble and become too embarrassed to insist on hand-checking. However, do not forget to have your camera hand-checked if there is film inside it. Some airport officials will

do this as a matter of course, others will gladly comply with your request. If you are given any trouble, politely remind the official that it is your right to have anything hand-checked.

RESTRICTIONS ON CAMERA EQUIPMENT

During the course of a normal day of sightseeing and picture-taking you'll no doubt encounter a variety of restrictions affecting the use of your camera. Although these restrictions may somehow seem inconsistent, even capricious at times, they are not.

The accompanying chart will give you specific information about the use of your camera equipment at some of the most popular tourist attractions in the United States. There are several general points to remember. First of all, museums use logic when establishing policies. Tripods and flash units are forbidden because these tend to inconvenience other museumgoers. Flashbulbs are forbidden because curators believe that the intense light and heat may damage oil paintings and tapestries. Wherever tripods and flash units are allowed, remember to be courteous to others who are also trying to enjoy the exhibits.

Second, it is understood that no

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*500 Twin Strap \$18.95 (protector pads included)

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• eliminates assistance in film carrying
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• top quality leather
• fashionably matches the Field Strap™



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(carry what you want — lenses, meter, etc.)



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TRAVELER

photographs may be taken for commercial use. If you are planning to sell your work, contact the public information officer in the museum and get clearance beforehand.

Another thing to remember is that privately owned museums tend to be stricter in their regulations regarding camera equipment than public museums. In Europe, however, this may not always be the case. In fact, permission may vary even from room to room within the same museum. To be safe, always check with the information booth as you enter the museum. Ask about restrictions governing camera equipment.

GETTING THROUGH CUSTOMS

If you go abroad, you should know how to clear customs with the greatest ease. Contrary to the traditional myth of customs official as ogre, he is just as eager that you get through customs quickly and without incident as you are—he just has to be thorough and assured that you are not bringing in something illegally. So, as long as you are declaring honestly, you don't need to worry about a thing.

Register your equipment and other valuables at a customs office *before* you go abroad. You need to do this each time you leave the United States. The process, which is very simple, involves bringing your equipment to the customs office, where an official will give you a certificate titled "Customs Form 4457, Certificate of Registration for Personal Effects Taken Abroad." You write your name and address, and list the articles (including serial numbers) you are taking with you. The customs officer will stamp this certificate. All you need to do is to keep this receipt safe during your trip and produce it upon your return if asked to do so. Don't absolutely panic if you lose this slip of paper. Most often questions arise about new equipment, but even if there is a dispute about your used equipment, the customs official will temporarily hold your gear and allow you to go home to find another proof of purchase. This can be a tedious chore, but at least you won't forfeit your equipment.

Customs offices are located in major cities and in all international airports. They are easy to locate. If you can't find the office nearest you by checking your phone directory, write: U.S. Customs, Public Affairs Office, 1301 Con-

stitution Avenue, Washington, D.C. 20229.

Jerome Hollander, Public Information Officer for the Los Angeles Regional Customs Office, advises travelers to keep receipts of goods purchased abroad, as well as the Certificate of Registration. "This is especially true if people buy something at a low price or buy it used. Keep these papers all together and in a convenient place," states Hollander. He also advises travelers to be sure to declare everything and state the price actually paid. Customs officials are trained to know the value of things, so don't try to trick them. If there is a dispute, be prepared to show your receipt.

If you are planning to purchase camera equipment abroad, be aware that many manufacturers have restricted the number of cameras and lenses that can be purchased abroad and brought into the U.S. These restrictions are registered with customs, which enforces this policy. While the number of cameras and lenses is often generous, it is essential that you obtain the booklet "Trademark Information" to inform yourself and prevent the purchase of too many new pieces of equipment. You can obtain the booklet from your customs office.

In general, your equipment and film will be admitted to most countries without question; however, if you are traveling to a country that is severely restrictive in other areas, it's a good idea to call that country's consulate beforehand to double-check about camera equipment. Usually restrictions are limited to where you can photograph rather than what you can bring into the country, but rules change all the time.

Your travels can be wondrous adventures that yield photographs to keep forever if you plan ahead, or, like Clyde's, they can be a series of mishaps. No one has to be like Clyde, so plan ahead, and have a good time. *Bon voyage!* □

BIBLIOGRAPHY

- Braasch, Gary, "Camerapacking," *Petersen's PhotoGraphic Magazine*, June, 1976.
- Dennis, Lisl, *How to Take Better Travel Photos*. Tucson: H.P. Books, 1979.
- Norton, Boyd, *Wilderness Photography*. New York: Reader's Digest Press, 1977.
- Travel Photography*. New York: Time-Life Books, 1972.
- Yob, Parry C. "Tips for the Travel Photographer," *Petersen's PhotoGraphic Magazine*, May, 1978.

ROBERT LAURA: NATURAL LANDSCAPES



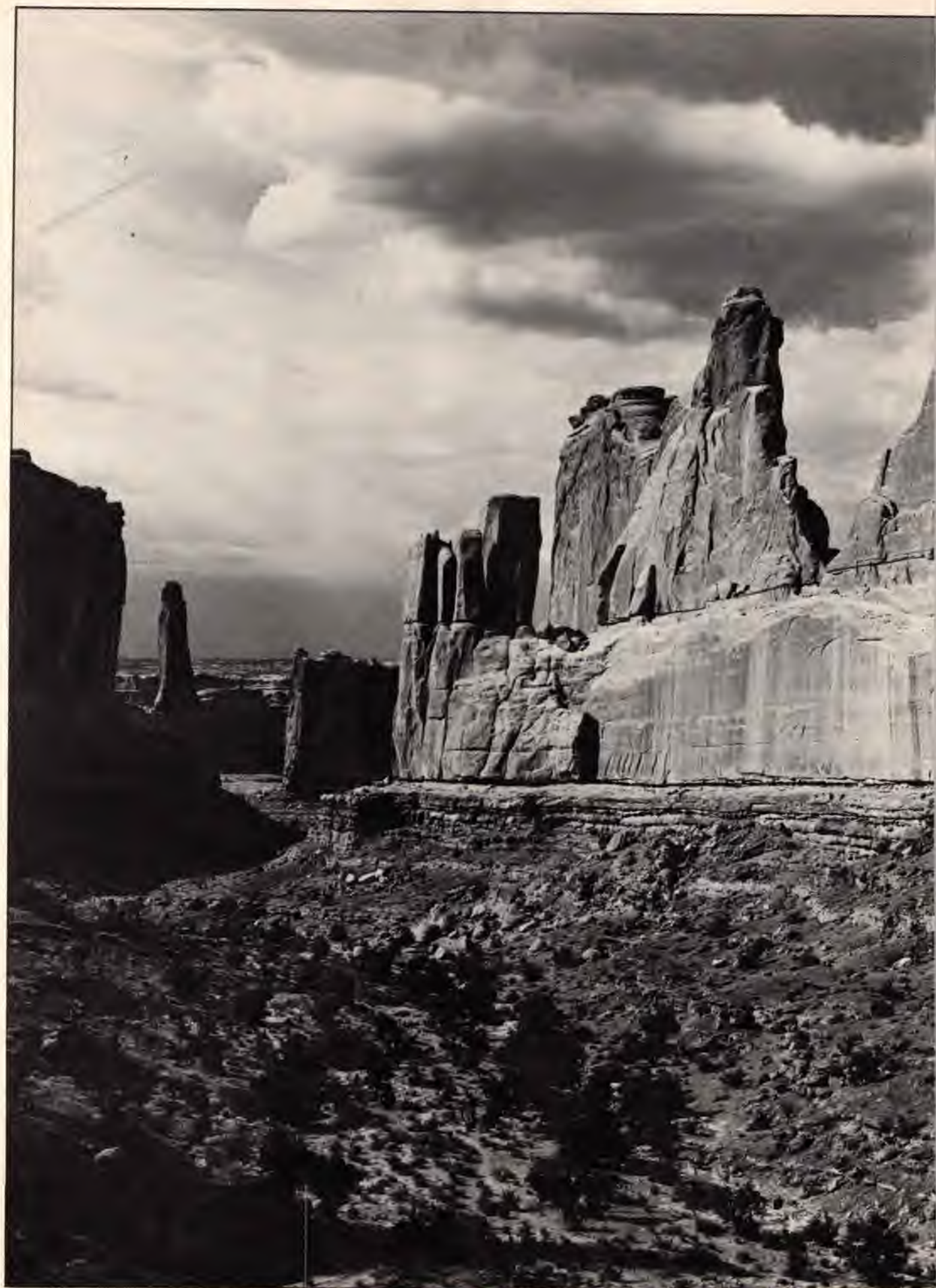
Grand Teton Mountains from Jackson Lake

□ Three summers ago, with no job and few prospects, Robert Laura climbed into his car and drove 14,000 miles, roaming from national park to national park. "I wanted to see the country," he says. He took along his $2\frac{1}{4} \times 2\frac{1}{4}$ Yashicamat camera, with which he preserved what he saw. So begins the story behind the making of these exquisite records of America's natural splendors.

Today, Laura is a teacher of earth science and biology at a middle school in his native New Jersey, and still an avid photographer. In fact, he has parlayed his photography into the classroom by using his crisp panoramic images as illustrations to show his science students real documents of the earth's magnificent phenomena.

Laura's summer vacations are now used to further pursue his interest in landscape photography. In his expeditions in the wilderness Laura sometimes backpacks and other times lives with forest rangers.

He has a strikingly simple technique that is belied by the quality of his images: "When I look through the camera, I always look at the four corners of the frame, and I'll move around if I don't like what I see." To maximize depth of field he prefers to use an aperture of $f/32$, and he measures for exposure with either a Weston Master VI or with the Yashica's meter. As for film, Laura relies on filtered Kodak Plus-X, most often using a yellow filter but occasionally a red or an orange one, "depending on whatever I want to bring out." □



Park Avenue, Arches National Park



The Great White Throne, Zion National Park

ROBERT LAURA

Dome Dweller, Yosemite National Park





Great Fountain Geyser, Yellowstone National Park

ROBERT LAURA

Grand Tetons from Snake River Overlook





Old Faithful, Yellowstone National Park



Black Canyon of the Gunnison, Colorado



North Cascades National Park

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Inyo National Forest, trail to Mount Whitney





Yosemite National Park

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2. Seven drawings will be held between February 28 and August 30, 1979, under the supervision of Ventura Associates, an independent judging organization. Decisions of the judges are final.
3. All entries must be received by June 16, 1979, to be eligible for the remaining monthly drawings.
4. For each of the first 6 drawings, you have a chance to win 1 Grand Prize, 5 First Prizes, 8 Second Prizes, 25 Third Prizes, and 100 Fourth Prizes. In the 7th and final drawings, you may win 6 Grand Prizes, 30 First Prizes, 48 Second Prizes, 150 Third Prizes, and 800 Fourth Prizes. Total number of prizes—1,666. All are guaranteed to be awarded.
5. Only one major prize to a household. No substitution for prizes offered unless manufacturers release new models of same value or higher replacing those offered. Tax is sole liability of winner.
6. Sweepstakes open to residents of the United States. Offer void in Howard County, Maryland, the states of Missouri and Florida and wherever prohibited by law. Employees and the families of Petersen Publishing Company, Ventura Associates and their respective agencies and affiliates are not eligible.
7. A list of major prize winners will be available after September 15, 1979. Send a stamped, self-addressed envelope to: Photographic Super Sweepstakes Winners, Ventura Associates, 101 Park Avenue, New York, N.Y. 10017.

"CONFUCIUS SAY . . ."

□ "In all things, success depends upon previous preparation, and without such preparation there is sure to be failure." Though Confucius may not have been specifically addressing the challenges of travel photography, he may as well have been, since so many of the sad disappointments involved in making travel pictures can be avoided just by investing a little time in previous preparation. Having learned this lesson well over the years, I speak with the conviction of personal experience!

It's become second nature for me to be fully prepared each time I go out with a camera to take pictures, for two good reasons: First, failure to get the pictures I need affects my livelihood; and second, I photograph so often that what I need is immediately apparent due to familiarity and practice. This professional regimen naturally sets me apart from photographers who take pictures less frequently and strictly for pleasure. This was made obvious to me at a recent camera club meeting I attended. Two members, just returned from extensive journeys, unhappily told about not getting good results from all the exposures they made. Though I couldn't determine the exact reasons for the picture losses from the information provided, both problems were of a technical nature and could most likely have been avoided.

When traveling with a camera, some of the same rules and principles of planning for any kind of trip apply. If an automobile excursion is planned, few people are foolhardy enough to leave without having their car thoroughly serviced before departure. When transportation is entrusted to others, previous preparation is assumed and expected of the carrier. The ship's captain system-

atically reviews his vessel before embarking, and the commercial airline pilot goes through an extensive checklist of the aircraft's functions before every take-off. Practicing such preventive maintenance, including a checklist, is just as basic to travel photography and applies equally to all photographic equipment and materials taken along.

Whether or not the actual trip lives up to expectations often depends substantially on the planning that goes into it. You or your travel agent must first decide on a destination, set down an itinerary, review transportation alternatives, choose accommodations and restaurants. Then you execute the plan, including all the necessary reservations and confirmations to assure that the necessities and amenities expected will be waiting for you. It is essential to investigate just as thoroughly the conditions under which you expect to take pictures, the kinds of subject matter and the availability of photographic supplies and services along the route of your trip. (For more ways to prepare for a trip, see "Portraits of Foreign Places," page 56.)

Inadequate preparation and incomplete planning can result in under- or overexposed film, no exposure at all due to unnoticed camera malfunction, fogged film, exposure of subjects on inappropriate film, incorrect color balance, and unavailability of processing for foreign-purchased film at home after the trip. And these are just a few of the possible disasters from a potentially longer list! Some of the steps you can take to prevent such disappointments are applicable to all photographic situations and all kinds of travel. Others are peculiar to particular modes of transportation, certain kinds of photography and specific destinations. So let's review some of the circumstances you might encounter and the scope of the preparation and planning you should

consider.

The equipment and supplies you take must be matched to the subjects and conditions of the picture-taking you expect to do. You should determine what you'll bring by thoroughly studying all information available about your route and destination. If, for instance, you know you'll be touring the streets of old European cities and will want pictures of the buildings lining these narrow avenues, a wide-angle lens is a virtual necessity. If you are interested in photographing the cliff divers at Acapulco or the bullfights in Mexico, a long telephoto is required.

Deciding on black-and-white film or color film for slides or prints is purely a matter of personal preference. But selecting the *specific* film (be it color or black-and-white) best suited to the subjects and light conditions you'll encounter is entirely another matter. You might, for example, assume that a trip to the tropics would require having only a slow or medium-speed film. Equatorial jungles and forests, however, create deep, dark shade, providing little light for picture-taking—and this means that you'll need a fast film.

Your method of transportation can also affect the selection of equipment and film. If you're going by private car to destinations within the United States and Canada, you can take along substantial equipment without concern for weight or the problem of carrying it. Nor do you need to be anxious about obtaining fresh supplies of most popular films if you run out. On the other hand, air travel to foreign countries puts a practical weight limit on the equipment you can take, and you'll have to pack an ample film supply so you don't have to rely on untested local sources.

As soon as you make the final decisions about what equipment to include and the kind of supplies to take,

you'll have the first items to head up your photo-travel checklist. The checklist is invaluable. It serves to remind you not to forget those seemingly insignificant but often essential items that are so frequently overlooked and become nagging irritations on a trip. Preparing the checklist well in advance allows time to carefully consider everything that's needed. Later on, just before departure when time is precious and excitement overrides caution, use it to confirm that everything is packed and in your bag.

CAMERA/LENS CHECKOUT AND PREPARATION

Preventive maintenance procedures to assure reliable equipment functioning constitute what essentially amounts to a second checklist. Many vacation trips occur after a winter hiatus when cameras can sit unused for some time. To be sure everything is working as it should, a few simple procedures must be performed before a trip:

1. Replace all batteries, whether they work or not, with fresh batteries, including those in your light meter and flash unit. So that you'll have spares, purchase at least two each of the batteries your equipment requires. Double the number if a camera or meter requires more than one.

2. Check the camera shutter function. Without film in the camera, cock the shutter and release it several times at each shutter speed. Then open the back, point the camera at a bright light, lock the film gate, and cock the shutter and release it at least once at each shutter speed. You won't be able to tell if the shutter speeds are accurate, but any gross shutter malfunctions will show up.

3. Check lens diaphragm functions. If your camera has a depth-of-field preview, engage it with the lens aperture set at maximum. While sighting through the viewfinder, stop the lens down one in-

SAMPLE PHOTO-TRAVEL CHECKLIST

- ☐ camera
- ☐ lenses
- ☐ lens cap
- ☐ lens shades
- ☐ filters
- ☐ light meter
- ☐ tripod
- ☐ cable release
- ☐ flash
- ☐ gray card
- ☐ extra batteries (camera, meter, flash)
- ☐ film (processing mailers)
- ☐ flashbulbs
- ☐ lens tissue
- ☐ lens cleaning fluid
- ☐ canned air
- ☐ soft cleaning brush
- ☐ camera neckstrap
- ☐ gadget bag
- ☐ Sima FilmShield lead film bags (for X-ray protection)
- ☐ Kodak Master Photoguide

crement at a time. The image in the viewfinder should get progressively darker. Then cock the shutter and set it at a slow shutter speed. Point the open camera back at a bright light source and release the shutter while you look at the front of the lens. Repeat this process for each f-stop at which the lens can be set to visually determine if the aperture is automatically closing down previous to the opening of the shutter. Repeat the test for each lens you plan to use with the camera.

4. Clean all dust from the inside of the camera with a soft brush and compressed air. Clean dust from the front and rear elements of all lenses and remove any other soil or dirt particles with lens cleaning fluid and tissue.

CAMERA/METER/FILM TEST

The first step toward bringing home consistently well-exposed photographs is to purchase a supply of film sufficient for your needs that is all from the same emulsion batch. Numbers on film boxes are in codes that identify the emulsion batch; film from

the same batch has the same code number. Buy one extra roll and test it with the camera and meter you will be taking on your trip. (You'll find that this film testing also confirms the mechanical functions of the camera, including winding and counting as well as performance of the shutter and apertures.)

1. Make a simple film-speed test using a Kodak Color Separation Guide gray scale and color patches. (Refer to "Film Testing: Why and How," "Talking Tech," July, 1976 issue.)

2. Use the rest of the test roll to make bracketed exposures of a variety of common subjects to obtain evidence for evaluating the film's response.

3. Have the film processed in the same manner as you will have the film from your trip processed.

4. Evaluate the results to determine the effective film speed so you can set your meter at a corrected exposure index if necessary. If a color film is being used, also check the rendition of the color patches and test subject to determine if the color fidelity of the film is accurate. If it isn't, plan for corrective filtration. If, for example, it's too cool (bluish), you may want to expose the film with a warming filter (skylight No. 1A or similar filter) on the trip.

SPECIAL PRECAUTIONS

Flying via commercial airlines involves conditions that affect photographers uniquely. First, security checks at airports use X-ray scanning machines to inspect carry-on luggage. These machines damage both exposed and unexposed film. If your film supply is in a separate container you can request that it not go through the X-ray unit and hand it to the security attendant for visual inspection. FAA regulations are supposed to permit such visual inspection of carry-on luggage. (For more information on airport security procedures, see "Be the Well-Prepared

Traveler," page 65.)

There is always the danger of theft around airports, especially during vacation season. You're particularly vulnerable if your camera gear is easily identifiable as such. For carrying camera equipment it's wise to use bags that resemble common pieces of luggage and don't advertise their contents to potential thieves. This is most important in those countries where photographic equipment is expensive due to high import duties.

Whenever possible, avoid putting camera equipment in luggage that is checked. Rough handling of baggage is not uncommon, and a camera and light meter are delicate instruments. Be sure your equipment container is an appropriate size and shape to fit under an airline seat or in the overhead storage section.

If you're traveling out of the country on an extended trip and taking a large supply of film, you may encounter customs difficulties when entering some countries. Check with the consular representatives of the countries on your itinerary for any limitation on the quantity of film that may be brought into the country.

Long trips also mean consideration of the fact that some color films deteriorate after exposure and require immediate processing. Either make reliable arrangements to have the film returned to a lab in the United States for processing, or acquire information about the availability of local processing in the countries you'll be visiting. The film manufacturer can supply this information; write to the customer relations department at their main offices. If you purchase film overseas and expect to process it in the U.S., be sure it's compatible with processes available here. Some films sold abroad may have the same brand name as films available here but may or may not include processing or slide mounting. □

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Zip _____



☐ In the early 1970's only a handful of photography workshops existed. Mostly one-man operations run on a shoestring, these were usually pioneered by some long-haired renegade photo-educator who'd gotten fed up with conventional—and stifling—photo education. Bucking the academic tide, these innovators struggled to create a serious alternative for studying photography in a freer, more stimulating environment. Aldous Huxley was correct when he said, "Innovators have generally been persecuted, and always derided as fools and madmen."

Today those very "madmen" are directors of some of the most prestigious workshops in the country. As you can quickly surmise from our mammoth special section of listings in this issue, the workshop concept has indeed proliferated. The anti-classroom, antistructure tenets of earlier days proved successful and actually provide the framework for current workshops, which have become virtually institutions unto themselves. Many even offer credit that is recognized by many colleges and universities.

But the workshop alternative is very different from traditional institutions. For one thing, most are located far from distracting urban hubbub. In countrified, bucolic areas or quaint seaport towns, workshop locales are delightfully conducive to fresh outlooks, clear thinking and creativity.

The workshop experience is unlike any other learning endeavor. The emphasis is on total immersion in photography. For a set period of time—which ranges from a weekend to several months—a participant lives, eats, sleeps, talks and practices photography. All, of course, transpires in magnificent surroundings laced with informal, flexible programs. Why not follow an evening slide lecture/presentation, as at the Chilmark Workshop on Martha's Vineyard, with sangria and snacks and a healthy photography discussion? As Chilmark's director Carol Lazar says, "There's nothing more satisfactory than being able to treat work like play and still learn and get results."

Lazar, who has run Chilmark for five seasons, believes a workshop offers numerous advantages. The constant interaction between student and staffers (many are well-known pros) is invaluable. "With so many pros around you're not afraid to ask anything at any time." Both the immediacy of answers and the ability to instantly act on them are tremendously satisfying. There's no waiting until the next class. And more can be

In sight

PEGGY SECILFON

WORKSHOP-ING

assimilated in the uninterrupted concentration of a week-long workshop than during 12 weeks of once-a-week course instruction. Hands-on experience is a much better teacher. In addition, groups are small and intimate. The people who participate want to be involved. Enthusiasm is contagious and stimulating.

Workshops attract photophiles of all ages, backgrounds, degrees of photo expertise and geographic areas. The factor in common to all is



Some people select workshops for location. Those pictured are learning photography and having fun in gorgeous Memensha as part of the Chilmark Workshop on Martha's Vineyard. © Carol Lazar.

a vital interest in photography—essentially, the desire to expand photographic knowledge. The opportunity to sharpen darkroom techniques, to develop a new way of seeing, or simply to learn how to use a camera better is all within grasp. However, the importance of living within the workshop community cannot be emphasized enough. Total commitment enriches involvement, interaction and feedback.

The most noticeable change from early workshops has been a giant leap from makeshift facilities to permanent structures. No more shoestrings! The Maine Photographic Workshops (MPW), under the guidance of founder David Lyman, is an impressive example. Nestled in the lovely fishing village of Rockport, MPW is now a spacious establishment consisting of two enormous buildings, 11 darkrooms with over 30 enlargers, gallery, store, color processing lab, sound studio and lecture theater. Most important, MPW ad-

heres to a philosophy of education that stresses "experience over facts."

Workshops vary. Some, such as Friends of Photography in Carmel, California; Visual Studies Workshop in Rochester, New York; The International Center of Photography in New York; and MPW in Rockport, function all year round. Others meet exclusively during summer months, when people are more likely to devote vacation time to their passion. Obviously the type of programs offered by each are quite diversified. Lightworks in Minneapolis usually features "name" photographers who teach week-long workshops. The Oregon Photography Workshop is more oriented toward combining photography with an exploration of western states. MPW straddles between "name"-photographer and special-topic workshops in such areas as underwater photography, the nude, master printmaking, photojournalism, etc. The Silver Eye in Pittsburgh features miniworkshops. And shorter-term summer workshops, such as Chilmarm, are generalized and encourage interaction at all levels.

Brochures are printed emissaries that describe workshops fully. These days they're as sophisticated as travel pamphlets. If you can't decide which workshop you'd like to try, start by using our listing to request a batch of different brochures. You'll get a complete description of sessions, dates, prices, facilities, and hopefully an idea of the workshop's philosophy.

If there's a particular photographer with whom you wish to study, or a specific subject, you can make the choice on that basis. If not, a recommendation from a veteran workshop-goer can be helpful. Word of mouth has built many a reputation!

Locale may be the deciding element. You can travel from Edward Weston's Point Lobos to the beautiful shores of Rockport to attend a workshop. Or if you'd like to spread your wings beyond stateside this summer, you can fly to Nafplion, Greece, for an intensive five-week workshop (arranged through Panopticon in Boston) or to Arles, France, for the 10th Rencontres Internationales de la Photographie, or to Venice, Italy, for the ICP/UNESCO-sponsored Venezia '79.

So pack your camera case, fill an overnighter with comfortable clothes and good walking shoes, and board a bus, train or plane headed for your selected photo camp. OK, you can take along a care package of Mallo-mars and Oreos! Just be sure to separate out the film. □

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BLUEPRINT SERIES

How To Make a Baby Broad Light from Your Flash

BY TOM COOK

PROJECT: To make an inexpensive, easy-to-carry reflector unit that changes raw flash light into soft, even light.

PURPOSE: To provide a reliable, convenient and portable source of lighting similar in quality to that available with elaborate "broad lights" used in professional studios.

EQUIPMENT: 1. White plastic dishpan (size not critical, about 12 x 14 x 5 inches); 2. milk-white translucent plastic diffusion material large enough to cover dishpan's opening (2 x 4-foot panels of this material are used to cover recessed fluorescent ceiling lights and are available at most lighting shops for around \$3; 3. combination tabletop tripod and handgrip with swivel head on top and tripod threads on the bottom; 4. tripod quick-mount device; 5. three-foot length of carpet binder bar—the two-inch-wide metal edging used where carpet meets hard surface in doorways (other similar material can be substituted); 6. flash shoe adapter—flash mounting shoe that will screw onto standard 1/4-inch tripod threads; 7. three 1/2-inch-long and two 3/4-inch-long 1/4-inch bolts with nuts and lock-washers (buy bolts with standard stove-bolt threads since they're the same as tripod threads); 8. electric drill with 1/4-inch bit; 9. saber saw or equivalent with blade for cutting metal and plastic.

CONSTRUCTION: Cut a piece of diffusion material to cover the open front of the dishpan. Cover the area of the cut with masking tape—it will prevent scratches, make penciling the dishpan outline easier and keep the diffusion material from cracking while it's being sawed. Use a fine-toothed blade for cutting this material. After completing all sawing and drilling operations, use a file or sandpaper to smooth



1. Author photographs a model car with baby broad atop a light stand. Note the soft, even light pattern.

rough edges.

Next, cut a length of carpet binder bar to fit across the back and extend a few inches past the dishpan edge to serve as the support for the flash unit. Allow a couple of extra inches to permit repositioning the flash mounting shoe if you should change types of flash units later, or want to attach remote triggering devices, auto-flash sensors, etc. Mount flash on the support bar with a 3/4-inch-long 1/4-inch bolt and the flash shoe adapter. Position unit so that the lens fits just inside the cutout to be made in the side of the pan (photo No. 4).

Don't attach the support bar to the dishpan until after you've marked and cut out the flash opening in the side of the dishpan. Again, use masking tape over the area. When selecting the location of this cutout, pick a point approximately in the center of the side of the pan offering the most convenient check of your flash unit's ready-light while handholding the baby broad. Drill a 1/4-inch hole for

the saw blade at any convenient point inside the area to be cut out and discarded, then start your sawing operation at that point.

Any minor misalignment of flash unit and cutout can be corrected by bending the support bar slightly after it's been bolted in place. You may find it necessary to add two large flat washers behind the bolt heads to prevent them from pulling through the plastic; it depends on the thickness of the material you've chosen. Attach the support bar with two 1/2-inch-long 1/4-inch bolts (photo No. 4).

Locate the best position for the tripod/handgrip quick-mount on the bottom of the baby broad. The location of this bolt hole is rather critical in terms of balance atop light stands. To find the best point for this hole, suspend the unit upside down on a fingertip and move it around until you locate the point of balance. That's the spot to mark.

Since the plastic used in the dishpans is often pretty flexible, the bottom may well need



2



4



5



6



7



3

2. These components are needed to make the baby broad: (top to bottom, left to right) diffuser; dishpan; tripod/handgrip with quick-mount in place and tabletop legs to right; flash support bar and hardware, including flash shoe adapter; stiffening sandwich materials and hardware, including half the tripod/handgrip quick-mount.

3. This is the completed unit with diffuser removed.

4. Mounting holes are drilled in flash unit support bar.

5. Mounting holes for strengthening sandwich used on bottom of baby broad are drilled.

6. Quick-mount shoe at bottom of baby broad allows tripod/handgrip to be quickly attached or removed.

7. Tripod/handgrip allows unit to be self-supporting (as shown here) or handheld or attached to standard tripods or light stands.

some stiffening for proper support on the grip. This can be done by bolting two short lengths of carpet binder bar together, one on the outside and the other on the inside, thus creating a metal-plastic-metal sandwich. One bolt hole used for this sandwich can be the same one used for the tripod/handgrip mount, and the other can be located at any convenient point. After marking and drilling these two holes, cut and drill the carpet binder bar pieces to be used for the stiffening sandwich, then bolt the stiffeners and the tripod/handgrip quick-mount in place. Use a $\frac{3}{4}$ -inch bolt for the quick-mount and a $\frac{1}{2}$ -inch bolt at the other loca-

tion (see photos No. 5 and 6).

All that remains is to attach the diffusion material over the front of the dishpan. A couple of overlapping layers of masking tape lengthwise along the joint between the diffusion material and the dishpan will easily hold the diffuser in place and eliminate serious light leaks (see photo No. 7).

GENERAL DISCUSSION: Make some test shots to find the exact guide number for your new baby broad unit. Obviously, you'll need to run tests with each flash unit type you'll be using. Be sure to conduct both indoor and outdoor tests, since reflective surfaces indoors prevent light loss and give a much higher

guide number than the same unit will yield outdoors. If you don't have a flash meter, bracket your test shots at about $\frac{1}{2}$ to $\frac{3}{4}$ of the flash unit's guide number.

It's a fundamental fact of lighting that small, point-source lights, such as portable flash units, have a tendency to concentrate their light in relatively narrow beams, and results are plagued by a harsh, contrasty look. Studio photographers avoid these problems by using physically larger—not necessarily more powerful—light sources. Users of the baby broad lighting unit described here can produce the same type of soft, diffused lighting. □

1979

SEMINARS & WORKSHOPS CALENDAR

The following calendar of photographic special events is made up of announcements received by PhotoGraphic Magazine. Interested readers should write directly to each institution for information about fees, curricula and accommodations. Sponsors of workshops/seminars who would like their programs listed in 1980 should send all pertinent information to 1980 Seminars & Workshops Calendar, Petersen's PhotoGraphic Magazine, 8490 Sunset Boulevard, Los Angeles, California 90069, prior to February 1, 1980.

MAY

MAY 5-6

THE ZONE WORKSHOP
(Exposure/development—all formats. Field trip, darkroom work.)
THE PHOTOGRAPHY PLACE
102 S. 17th Street
Philadelphia, Pennsylvania 19103

MORLEY BAER: THE BIG SUR COAST
(Photographic seeing; camera/darkroom techniques. Bring mounted prints for discussion.)
Patty Barron
UNIVERSITY OF CALIFORNIA EXTENSION
Santa Cruz, California 95064

MAY 7

FOCUS '79 SEMINARS
(Sharpen abilities/increase sales for professionals.)
Jan Miller
FOCUS '79
P.O. Box 1703
Santa Monica, California 90406

MAY 7-JUNE 18

WORKSHOP III
(Intermediate technical course in black-and-white photography.)
Tom Davies
THE PHOTOGRAPHY PLACE
See May 5-6 for address

MAY 8-JUNE 12

WORKSHOP I
(Introduction/basic photography.)
Stephen G. Williams
THE PHOTOGRAPHY PLACE
See May 5-6 for address

MAY 9

PHOTOGRAPHY WORKSHOP IN DESERT COUNTRY
(Field trip in San Jacinto Mountains. Emphasis on macrophotography, backlighting, composition, texture, color balance, telephoto lens.)
Carolyn Malloy
THE ARTS, UCLA EXTENSION
10995 Le Conte Avenue, Room 640
Los Angeles, California 90024

SEMINARS & WORKSHOPS CALENDAR

MAY 13

BOTANICAL/ZOOLOGICAL HOW-TO & TEACH-IN

(Nature photography techniques.)
Harry Michaels
3935 Blackstone Avenue
Riverdale, New York 10471

MAY 14

FOCUS '79 SEMINARS

See May 7 for address

MAY 17-20

PHOTOJOURNALISM WORKSHOP WITH
DECLAN HAUN
Stephen Williams
THE PHOTOGRAPHY PLACE
See May 5-6 for address

MAY 18-20

CAPE HATTERAS NATIONAL SEASHORE FIELD
WORKSHOP
(Intermediate level with basics for
beginners and "area research" to aid
professionals.)
Bob Shanklin, Director
SOUTHERN SCHOOL OF PHOTOGRAPHY
517 Thornhill Road
Fort Walton Beach, Florida 32548

MAY 18-21

MASTER'S SEMINAR, MORLEY BAER
(Field trip, approaches to
architectural/historical photography.)
UNIVERSITY OF CALIFORNIA EXTENSION
See May 5-6 for address

MAY 19-20

YOSEMITE
(Landscape photography/print
commentary with Ted Orland.)
UNIVERSITY OF CALIFORNIA EXTENSION
See May 5-6 for address

MAY 19-26

CANYONLANDS NATIONAL PARK
PHOTOGRAPHIC WORKSHOP
Mark Middleton
Museum of Northern Arizona
Route 4, Box 720
Flagstaff, Arizona 86001

MAY 21

ROBIN PERRY'S CREATIVE COLOR
WORKSHOPS
(Professionals/advanced amateurs. Expand
knowledge/increase creative process
abilities.)
ROBIN PERRY
820 Hartford Rd.
Waterford, Connecticut 06385

FOCUS '79 WORKSHOPS
See May 7 for address

MAY 26

BASIC PHOTOGRAPHY SEMINAR, DAYTON
Griff Thomas
JIM OWENS PRODUCTIONS
P.O. Box 96
Wilmore, Kentucky 40390

JUNE

JUNE 1-3

DON CARROLL'S FOCUS 2000
New York—Advertising pro Don Carroll
covers basics, creative techniques and
business.)
Marie Carroll
DON CARROLL'S FOCUS 2000
33 East 60th Street
New York, New York 10022

JUNE-SEPTEMBER

STUDENT PRODUCTION WORKSHOP
(Shooting and editing full-length 16mm
feature film. Crew positions assigned by
ability.)
Eugene Leach, Director
THE FILM INSTITUTE
P.O. Box 6651
Cleveland, Ohio 44101

JUNE 3-9

OWENS VALLEY PHOTOGRAPHY WORKSHOPS
(Communication through photography.
Field trip, Bishop, California.)
Bruce Barnbaum
OWENS VALLEY PHOTOGRAPHY
WORKSHOPS
P.O. Box 225
Agoura, California 91301

JUNE 4

FOCUS '79 SEMINAR
See May 7 for address

JUNE 4-7

WEDDING PHOTOGRAPHY
(Customs/etiquette/lighting/posing/
merchandising.)
Sue Dearholt, Summer Workshops
BEMIDJI STATE UNIVERSITY
Bemidji, Minnesota 56601

JUNE 4-JULY 6

ADVERTISING PHOTOGRAPHY WORKSHOP
(Client relationships and legal
requirements/product photography/posing
models/price estimating.)
COLOR PHOTOGRAPHY
(Emphasizes creativity, principles of design,
photographic controls. Repeated
July 9-August 10.)
INTRODUCTORY PHOTOGRAPHY
WORKSHOP
(Basic camera handling, lighting,
darkroom. Repeated July 9-August 10.)
NATURE PHOTOGRAPHY
(Field work and individual assistance.)
George Bedirian
ROCHESTER INSTITUTE OF TECHNOLOGY
One Lomb Memorial Drive
Rochester, New York 14623

JUNE 7-29

23-DAY WILDERNESS PHOTOGRAPHIC
EXPEDITION
Robert Reynolds
WILDERNESS ENCOUNTER
720 Grand Avenue, P.O. Box 1045
Glenwood Springs, Colorado 81601

JUNE 9-10

APERTURE 79
(Annual photocommunication conference
for professionals.)
APERTURE 79
Box 72
Durham, California 95938

BASIC PHOTOGRAPHY WEEKEND WORKSHOP

(For the new photographer.)
CREATIVE VISION WORKSHOPS
317 E. Winter Avenue
Danville, Illinois 61832

JUNE 9-13

THE JUNE SHORT COURSE—UNIVERSITY OF THE
SOUTH, SWANNEE, TENNESSEE
(Seven courses offered basic to advanced.
Lectures by noted professionals.)
NEIL CHAPUT DE SAINTONGE
PHOTOGRAPHIC WORKSHOPS
P.O. Box 54284
Atlanta, Georgia 30308

JUNE 10-JULY 15

PANOPTICON SUMMER WORKSHOP
(Five weeks in Greece with Constantine
Manos and Tad Papageorge. Some travel
while pursuing serious study in
photography.)
THE PANOPTICON SUMMER WORKSHOP
187 Bay State Road
Boston, Massachusetts 02215

JUNE 11-14

BASIC CAMERA HANDLING
(Composition/film processing/contact printing.)
BEMIDJI STATE UNIVERSITY
See June 4-7 for address

JUNE 11-15

HOLOGRAPHY WORKSHOP I
(For college and university physics
teachers only.)
HOLOGRAPHY WORKSHOPS
Lake Forest College
Lake Forest, Illinois 60045

VISION AND TECHNIQUE: HENDY WOODS
STATE PARK
(Field photography, including Mendocino
Coast.)
UNIVERSITY OF CALIFORNIA EXTENSION
See May 5-6 for address

SUPER SEMINAR
(Preparing and presenting professional slide
shows.)
Steve Jacobson
SICKLES, INC.
Continuing Education Division
P.O. Box 3396
Scottsdale, Arizona 85257

JUNE 15-17

YOSEMITE NATURE PHOTOGRAPHY
(Photographing nature with Marion
Patterson.)
NATURE EXPEDITIONS INTERNATIONAL
599 College Avenue
Palo Alto, California 94306

SEMINARS & WORKSHOPS CALENDAR

JUNE 16-23

SUMMER '79 WORKSHOP. UNIVERSITY OF THE SOUTH—SWANNEE
(22 courses offered, basic to advanced. Seminars with visiting international photographers included.)
NEIL CHAPUT DE SAINTONGE
PHOTOGRAPHIC WORKSHOPS
See June 9-13 for address

JUNE 17-23

KENDA NORTH: "SEEING AND WORKING IN COLOR"
(Color vision/materials. Dye transfer, printing/transparencies, color in black-and-white.)
LIGHTWORKS PHOTOGRAPHY WORKSHOPS
25 University Avenue Southeast
Minneapolis, Minnesota 55414

NATURE PHOTOGRAPHY WORKSHOPS
(Field trips with Larry West and John Shaw.)
PHOTOGRAPHY
1090 Crestview
Harrison, Michigan 48625

JUNE 17-24

GERI VARTANIAN PHOTOGRAPHIC SEMINARS
(Nova Scotia photo tour.
Technique/lighting/composition.)
PHOTOGRAPHIC SEMINARS
150 E. Hartsdale Avenue
Hartsdale, New York 10530

JUNE 17-27

ZONE VI WORKSHOP WITH FRED PICKER
(Black-and-white only. All formats, beginners/professionals.)
ZONE VI STUDIOS, INC.
Newfane, Vermont 05345

JUNE 17-JULY 8

WORKSHOP IN PHOTOGRAPHY AND ORIENTAL FOODS
(Visit Japan, Taiwan, Hong Kong, Thailand, Singapore and Bali for three weeks. Included are visits to cooking schools, wineries, and restaurants famed for specialized cuisines, the photogenic wonders of the Orient and seldom-visited remote locations.)
Robert Routh
CALIFORNIA STATE UNIVERSITY
AT LONG BEACH
1250 Bellflower Boulevard
Long Beach, California

JUNE 18-22

HOLOGRAPHY WORKSHOP II
(General level for those with or without technical experience.)
HOLOGRAPHY WORKSHOPS
See June 11 for address

JUNE 18-29

COLOR PRINTING AND PROCESSING
(Professional or equivalent; making internegatives/judging negatives/use of color analyzers. Repeated July 16-27.)
ROCHESTER INSTITUTE OF TECHNOLOGY
See June 4-July 6 for address

ARIZONA WILDLANDS
(Field sessions with Ralph Putzner and Danna Otrosen.)
UNIVERSITY OF CALIFORNIA EXTENSION
See May 5-6 for address

JUNE 18-JULY 8

WORKSHOP IN ANTHROPOLOGICAL PHOTOGRAPHY
(Yucatan, Mexico. Ages 14-18.
Basic/advanced techniques.)
Professor M. Gibson
Box 590
Cave Creek, Arizona 85331

JUNE 22-25

VALLEY OF FIRE WORKSHOP
(Field trip based in Las Vegas includes Valley of Fire and Krupp Ranch.)
Al Belson
NEWPORT SCHOOL OF PHOTOGRAPHY
3720 Campus Drive
Newport Beach, California 92660

JUNE 24-29

WORKSHOP IN BIOMEDICAL PHOTOGRAPHY
(Comprehensive one-week program in all important areas of biomedical photography.)
John P. Vetter, R.B.P., Director
Medical Media Services
WESTERN PENNSYLVANIA HOSPITAL
4800 Friendship Avenue
Pittsburgh, Pennsylvania 15224

JUNE 24-30

TOPIC TO BE ANNOUNCED
LIGHTWORKS PHOTOGRAPHY WORKSHOPS
See June 17-23 for address

ICELAND PHOTOGRAPHY TOUR
(Field trip includes flight to Westman Islands and overnight trip to a glacier.)
NEIL CHAPUT DE SAINTONGE
PHOTOGRAPHIC WORKSHOPS
See June 9-13 for address

JUNE 25-JULY 27

PHOTOGRAPHIC TRAVEL-STUDY WORKSHOP
(Nine days instruction at RIT, 21 days travel and photography in Poland.)
Wanda Tubbs
ROCHESTER INSTITUTE OF TECHNOLOGY
College of Continuing Education
One Lomb Memorial Drive
Rochester, New York 14623

JUNE 25-27

PHOTOGRAPHIC WORKSHOP FOR TEACHERS
(Aesthetic/technical aspects, teaching method concepts, career opportunities. Scholarships available.)
ROCHESTER INSTITUTE OF TECHNOLOGY
See above for address

JUNE 25-29

HOLOGRAPHY WORKSHOP III
(For high school science teachers only.)
HOLOGRAPHY WORKSHOPS
See June 11-15 for address

JUNE 26-JULY 6

ZONE SYSTEM WORKSHOP
(Zone System as it applies to the art of fine print production. Includes field/darkroom work.)
OLIVER GAGLIANI WORKSHOPS
519 29th Avenue
San Francisco, California 94121

JUNE 29-JULY 2

PHOTOGRAPHING YOSEMITE: PAST AND PRESENT
(Field trip Yosemite Valley/Tuolumne Meadows. Discussion and viewing works of Muybridge, Watkins, W. H. Jackson and Ansel Adams. Conducted by Norman Locks.)
UNIVERSITY OF CALIFORNIA EXTENSION
See May 5-6 for address

JUNE 30

OUTBACK SAFARI TO AUSTRALIA
(Camera safari with Richard Raskoff. Independent-study college credit available.)
Kathleen MacLennan
PHOTO-JOURNEYS
P.O. Box 38126
Hollywood, California 90038

JULY

JULY 1-7

EVA RUBINSTEIN "MESSAGES FROM THE INTERIOR"
(Personal criticism and assignments made daily to help students find individual strengths.)
LIGHTWORKS PHOTOGRAPHY WORKSHOPS
See June 17-23 for address

JULY 1-AUGUST 3

PHOTOJOURNALISM
(Basic camera, lab processing and printing—free-lance oriented. Tricks of the trade, where to sell.)
MIAMI PHOTOGRAPHY COLLEGE
1805-N North East 142 Street
North Miami, Florida 33181

JULY 4-8

THE RANGE OF LIGHT
(Five-day backpacking trip to Yosemite's High Sierras with Norman Locks.)
UNIVERSITY OF CALIFORNIA EXTENSION
See May 5-6 for address

JULY 5-8

THE OGUNQUIT PHOTOGRAPHY SCHOOL
(“Lenses That See the Unusual Way” with Norman Rothschild.)
Sruar Nudelman, Director
THE OGUNQUIT PHOTOGRAPHY SCHOOL
Box 568
Ogunquit, Maine 03907

JULY 5-26

ISRAEL FILMMAKING TOUR
(Tour Israel and produce a short 16mm film.)
THE FILM INSTITUTE
See June-September for address

SEMINARS & WORKSHOPS CALENDAR

JULY 6-28

WILDERNESS PHOTO EXPEDITION
See June 7-29

JULY 7

PHOTOGRAPHY WORKSHOP FOR TRAVELERS
(Six classes to increase visual awareness of the traveler. Three all-day field trips.)
THE ARTS-UCLA EXTENSION
See May 9 for address

JULY 7-16

LONDON THROUGH THE EYE OF A CAMERA
(Critiques daily, tour culminates with invitational showing of students' best work.)
Dorothy L. Mayers
PHOTOGRAPHY SEMINARS INTERNATIONAL
P.O. Box 7043, Landscape Station
Berkeley, California 94707

JULY 8-13

WEST COAST SCHOOL OF PROFESSIONAL PHOTOGRAPHY
(Eight courses for the professional photographer's continuing education at Brooks Institute of Photography, Santa Barbara.)
Frederick E. Foss, Director
WEST COAST SCHOOL OF PROFESSIONAL PHOTOGRAPHY
P.O. Box 4614
Fresno, California 93744

JULY 8-14

FRANK GOHLKE—"PAYING ATTENTION"
(Acknowledging one's own predispositions and preconceptions in photography. Daily assignments and criticism.)
LIGHTWORKS PHOTOGRAPHY WORKSHOPS
See June 17-23 for address

JULY 8-21

CHILMARK PHOTOGRAPHY WORKSHOP—MARTHA'S VINEYARD, MASSACHUSETTS
(Professional photographers provide individual guidance at any level of accomplishment.)
CAROL LAZAR
75 Central Park West
New York, New York 10023

JULY 9

ROBIN PERRY'S CREATIVE COLOR WORKSHOPS
See May 21 for address

JULY 9-12

THE OGUNQUIT PHOTOGRAPHY SCHOOL
("Creative Color Workshop" with Norman Rothschild.)
THE OGUNQUIT PHOTOGRAPHY SCHOOL
See July 5-8 for address

JULY 9-13

PHOTO STUDIO TECHNIQUES
(Learn techniques/materials used to produce photos designed by advertising/magazine publishing clients.)
WORKSHOPS AT NORMAN SNYDER STUDIOS
7 East 19th Street
New York, New York 10003

WORKSHOP I

(Basic camera handling, film processing and printing assignments. Photo history through slides and discussion.)
THE PHOTOGRAPHY PLACE
See May 5-6 for address

JULY 9-AUGUST 10

ADVANCED NATURE PHOTOGRAPHY
(Individual study and some field work.)
ROCHESTER INSTITUTE OF TECHNOLOGY
See June 4-July 6 for address

JULY 13

BASIC PHOTOGRAPHY SEMINAR,
BLOOMINGTON
See May 26 for address

JULY 13-16

THE POLAROID IMAGE
(Edward Gaffey of Polaroid demonstrates special techniques using Polaroid materials for photographers and educators. At Weber's Victor School in Colorado's Front Range.)
UNIVERSITY OF CALIFORNIA EXTENSION
See May 5-6 for address

JULY 14

BASIC PHOTOGRAPHY SEMINAR,
INDIANAPOLIS
See May 26 for address

JULY 14-22

COLORADO WORKSHOP
(Tour Colorado, complete with lodges, transportation and photography instruction.)
PHOTOVENTURE, LTD.
Department PG9
22730 Woodward Avenue
Ferndale, Michigan 48220

JULY 15-21

MARK COHEN
(Black-and-white photography, daily assignments and criticism.)
LIGHTWORKS PHOTOGRAPHY WORKSHOPS
See June 17-23 for address

OLD WEST SEMINAR

(Illustrated lectures/critiques. Daily field trips.)
OLD WEST SEMINAR
Box 161
The Dalles, Oregon 97058

NATURE PHOTOGRAPHY WORKSHOP
See June 17-23

JULY 16-20

THE OGUNQUIT PHOTOGRAPHY SCHOOL
("Photographic Sensitivity" with Stuart Nudelman.)
THE OGUNQUIT PHOTOGRAPHY SCHOOL
See July 5-8 for address

WORKSHOP II

(Intermediate printing techniques/portfolio presentation. Emphasis on individual search for direction. Prior knowledge of printing/processing needed.)
THE PHOTOGRAPHY PLACE
See May 5-6 for address

BEGINNING PHOTOGRAPHY

(Basic introduction to photography with David Husom.)
Summer Arts Study Center
UNIVERSITY OF MINNESOTA
1128 LaSalle Avenue
Minneapolis, Minnesota 55403

JULY 16-AUGUST 3

INDUSTRIAL PHOTOGRAPHY
(View cameras/industrial interiors/heavy machinery photography.)
ROCHESTER INSTITUTE OF TECHNOLOGY
See June 4-July 6 for address

JULY 20-AUGUST 4

KENYA EAST AFRICA SAFARI
(Critiques and processing en route; Don Laosli and Stan Osolinski.)
PHOTOVENTURE
Box 2246-PG9
Southfield, Michigan 48037
or Hunts Travel (800)521-2660—
In Michigan (313)399-3434

JULY 23-27

PHOTO STUDIO TECHNIQUES
See July 9-13

JULY 23-AUGUST 3

THE OGUNQUIT PHOTOGRAPHY SCHOOL
(Photographic tour of Nova Scotia.)
See July 5-8 for address

JULY 23-26

BASIC PHOTOGRAPHY
(Emphasis on do-it-yourself, no darkroom conditions.)
Joann Mizurani
UNIVERSITY EXTENSION
Liberal Arts Department
Davis, California 95616

JULY 23-27

PHOTOGRAPHY
(Field trips, discussions, open lab with Gary Hallman.)
UNIVERSITY OF MINNESOTA
See July 16-20 for address

JULY 30-AUGUST 2

INTERMEDIATE BLACK-AND-WHITE PHOTOGRAPHY
(Emphasis on exposure/development/printing as integrated whole to achieve greater control over print quality.)
UNIVERSITY EXTENSION—DAVIS, CALIFORNIA
See July 23-26 for address

AUGUST

AUGUST 2-23

ISRAEL FILMMAKING TOUR
(Tour Israel and produce short 16mm film.)
THE FILM INSTITUTE
See June-September for address

SEMINARS & WORKSHOPS CALENDAR

AUGUST 4-7

NIGHT SKY AT TUOLUMNE
(Tom Bullock and Randy La Monte conduct day/night photo sessions/discussion of astronomical and night landscape.)
UNIVERSITY OF CALIFORNIA EXTENSION
See May 5-6 for address.

AUGUST 5-11

SWISS PHOTO WORKSHOPS
(Practices/principles of photography for the English-speaking advanced photographer in Switzerland.)
SWISS PHOTO WORKSHOPS
P.O. Box 124
5600 Lenzburg 2
Switzerland

OWENS VALLEY PHOTOGRAPHY WORKSHOPS
(Location: Santa Cruz, California)
See June 3-9 for address

AUGUST 6-9

COLOR SLIDE PRODUCTION WORKSHOP
(Upgrade skills in self-processing Ektachrome slide film.)
UNIVERSITY EXTENSION—DAVIS, CALIFORNIA
See July 23-26 for address

AUGUST 6-10

WORKSHOP I
See July 9-13

MONOMOY SUMMER PHOTOGRAPHIC WORKSHOP I
(Basic photography introduction on Nantucket Island, Massachusetts. Limited to ten participants.)
THE PHOTOGRAPHY PLACE
See May 5-6 for address

WILDLIFE PHOTOGRAPHY AT MCKINLEY PARK, ALASKA
(Five-day photo tour.)
Hank Bunker
WILDERNESS ADVENTURE
904 Mt. Holyoke Place
Swarthmore, Pennsylvania 19081

PHOTO STUDIO TECHNIQUES
See July 9-13

AUGUST 7-29

WILDERNESS PHOTO EXPEDITION
See June 7-29

AUGUST 8-14

PHOTOGRAPHY WORKSHOP TO BODIE GHOST TOWN, MONO LAKE, CONVICT LAKE AND MAMMOTH
(Field trip. Students must provide own transportation.)
THE ARTS, UCLA EXTENSION
See May 9 for address

AUGUST 10-25

AFRICA
(Safari to Kenya East Africa, complete with lodges, ground and air transportation and photography instruction.)
PHOTOVENTURE
See July 14-22 for address

AUGUST 12-18

NATURE PHOTOGRAPHY WORKSHOPS
See June 17-23

AUGUST 12-22

ZONE VI WORKSHOP WITH FRED PICKER
See June 17-27

AUGUST 13-17

MONOMOY SUMMER PHOTOGRAPHIC WORKSHOP II
(Intermediate photography designed to develop personal vision, printing/portfolio presentation. Limited to ten participants.)
THE PHOTOGRAPHY PLACE
See May 5-6 for address

AUGUST 13-24

MASTERING THE FINE PRINT
(Field/lab work for the experienced fine-print photographer.)
OLIVER GAGLIANI WORKSHOPS
See June 26-July 6 for address

AUGUST 20-24

PROFESSIONAL STUDIO WORK
(For photographers with studio experience. Will produce professional portfolio-quality samples for product, fashion, illustration markets.)
WORKSHOPS AT NORMAN SNYDER STUDIOS
See July 9-13 for address

AUGUST 20-27

THE CANYON COUNTRY
(Travel with Al Weber through Canyonlands, Arches, Mesa Verde National Park, Escalante Canyon and other points.)
UNIVERSITY OF CALIFORNIA EXTENSION
See May 5-6 for address

AUGUST 21-24

HUMAN FORM IN NATURE
(Study the female form contrasted with harsh rock forms in Alabama Hills at Lone Pine, California.)
Jim Hill
CHERRY MOUNTAIN SEMINARS
Box 782
Half Moon Bay, California 94019

AUGUST 21-25

ROCKY MOUNTAIN NATIONAL PARK, COLORADO FIELD WORKSHOP
SOUTHERN SCHOOL OF PHOTOGRAPHY
See May 18-20 for address

AUGUST 22-SEPTEMBER 8

ALASKA AND THE PRIBILOF ISLANDS
(Explore Alaska/photograph wildlife with Steve Crouch.)
NATURE EXPEDITIONS INTERNATIONAL
599 College Avenue
Palo Alto, California 94306

AUGUST 25-26

CREATIVE VISION WORKSHOP
(Learning to see photographically—design/composition.)
CREATIVE VISION WORKSHOPS
See June 9-10 for address

AUGUST 26-30

BIOCOMMUNICATIONS '79
(Triennial Conference of Biocommunications Specialists.)
UNIVERSITY OF ILLINOIS MEDICAL ART
1202 California
Urbana, Illinois 61801

AUGUST 26-SEPTEMBER 2

194-E ABSAROKA/BEARTOOTH WILDERNESS PHOTOGRAPHY
(Backpack trip through wildlife habitat.)
SIERRA CLUB-OUTING DEPARTMENT
530 Bush Street
San Francisco, California 94108

AUGUST 28-SEPTEMBER 1

YELLOWSTONE NATIONAL PARK FIELD WORKSHOP
SOUTHERN SCHOOL OF PHOTOGRAPHY
See May 18 for address

SEPTEMBER

SEPTEMBER 1-3

THE CREATIVE SPIRIT
(Ruth Bernhard, Shirley Fisher and Duncan Wallace explore uses of awareness/imagination in creative image-making.)
UNIVERSITY OF CALIFORNIA EXTENSION
See May 5-6 for address

SEPTEMBER-NOVEMBER

(Sundays only)
FALL COLOR/NATURE CLOSE-UP
(Use of close-up equipment and techniques for dynamic effect.)
Alan Lowy, Adult Education
CRANBROOK INSTITUTE OF SCIENCE
500 Lone Pine Road
Bloomfield Hills, Michigan 48010

SEPTEMBER 2-8

SWISS PHOTO WORKSHOP
See August 5-11

SEPTEMBER 6-28

WILDERNESS PHOTO EXPEDITION
See June 7-29

SEPTEMBER 7-9

LAS VEGAS, NEVADA, FIELD WORKSHOP
SOUTHERN SCHOOL OF PHOTOGRAPHY
See May 18-20 for address

SEPTEMBER 9-16

OLD WEST SEMINAR
See July 15-21

SEPTEMBER 10

ROBIN PERRY'S CREATIVE COLOR WORKSHOPS
See May 21

SEPTEMBER 10-12

ZION NATIONAL PARK/GRAND CANYON NORTH RIM FIELD WORKSHOP
SOUTHERN SCHOOL OF PHOTOGRAPHY
See May 18-20 for address

SEMINARS & WORKSHOPS CALENDAR

SEPTEMBER 10-14

SUPER SEMINAR
See June 11-15

SEPTEMBER 14-16

DON CARROLL'S FOCUS 2000
(Los Angeles—see June 1-3)

SEPTEMBER 15-22

SEPTEMBER WORKSHOP, GWEN VALLEY,
BREVARD, NORTH CAROLINA
(28 hours' concentrated photographic
education, all levels. Lectures by published
photographic artists.)
NEIL CHAPUT DE SAINTONGE
PHOTOGRAPHIC WORKSHOPS
See June 9-13 for address

SEPTEMBER 16-20

FLAGSTAFF, ARIZONA FIELD WORKSHOP
SOUTHERN SCHOOL OF PHOTOGRAPHY
See May 18-20 for address

SEPTEMBER 16-22

NATURE PHOTOGRAPHY WORKSHOPS
See June 17-23

SEPTEMBER 17-20

FALL, YOSEMITE
(Field trip conducted by Al Belson.)
NEWPORT SCHOOL OF PHOTOGRAPHY
See June 22-25 for address

SEPTEMBER 21-23

MONUMENT VALLEY, UTAH FIELD
WORKSHOP
SOUTHERN SCHOOL OF PHOTOGRAPHY
See May 18-20 for address

SEPTEMBER 21-30

CANYONLANDS NATURE PHOTOGRAPHY
(Photograph canyon country in the
American Southwest with Steve Crouch and
Philip Hyde.)
NATURE EXPEDITIONS INTERNATIONAL
See August 22-September 8 for address

SEPTEMBER 22

BASIC PHOTOGRAPHY SEMINAR,
BLOOMINGTON
See May 26

SEPTEMBER 23-30

FIAP CONGRESS/APSCON '79
(International event. Wide range of
illustrated lectures, print/slide exhibitions;
tours Australia's national capital.)
A. V. Clark
CONGRESS & CONVENTION SECRETARY
9 Canning Street
Ainslie, A.C.T. 2602
Australia

SEPTEMBER 28-OCTOBER 1

OWENS VALLEY PHOTOGRAPHY WORKSHOP
(Technical/aesthetic aspects of the fine print
with John Sexton and Henry Gilpin.
Monterey coast/rural field sessions.)
OWENS VALLEY PHOTOGRAPHY WORKSHOPS
See June 3-9 for address

OCTOBER

OCTOBER 1

PHOTO SAFARI TO AUSTRALIA
(Tour wildlife sanctuaries and the Outback
with Miriam Austerman.)
PHOTO-JOURNEYS
See June 30 for address

EVENING PHOTOGRAPHIC WORKSHOPS

(Courses offered in basic photography,
basic portraiture, color printing and
black-and-white printing.)
ANTONELLI SCHOOL OF PHOTOGRAPHY
1210 Race Street, P.O. Box 1767
Philadelphia, Pennsylvania 19105

OCTOBER 1-5

GERI VARTANIAN PHOTOGRAPHIC SEMINARS
(Technique/lighting/composition.)
See June 17-24 for address

OCTOBER 3-13

CANYONLANDS NATURE PHOTOGRAPHY
See September 21-30

OCTOBER 6

BASIC PHOTOGRAPHIC WORKSHOP, CHICAGO
See May 26

OCTOBER 6-7

CREATIVE VISION WORKSHOP
See August 25-26

OCTOBER 7-24

TRAVEL WITH A CAMERA*
(Tour Spain and Portugal with Ira Stanley.)
TRAVEL WITH A CAMERA*
114 Hilary Circle
New Rochelle, New York 10804

OCTOBER 8-12

GERI VARTANIAN PHOTOGRAPHIC SEMINARS
See October 1-5

OCTOBER 11-13 or OCTOBER 15-17

SMOKY MOUNTAIN NATIONAL PARK,
TENNESSEE FALL FOLIAGE PILGRIMAGE
SOUTHERN SCHOOL OF PHOTOGRAPHY
See May 18 for address

OCTOBER 12-14

YOSEMITE NATURE PHOTOGRAPHY
See June 15-17

OCTOBER 14-20

OWENS VALLEY PHOTOGRAPHY
WORKSHOPS
See June 3-9

OCTOBER 15

ROBIN PERRY'S CREATIVE COLOR
WORKSHOP
See May 21

OCTOBER 19-21

DON CARROLL'S FOCUS 2000
(New York City—see June 1)

OCTOBER WORKSHOP-GWEN VALLEY,
BREVARD, NORTH CAROLINA
(Preparing portfolio, creative color, nature,
basic camera, portraiture. Lecture by
John Earl.)
NEIL CHAPUT DE SAINTONGE
PHOTOGRAPHIC WORKSHOPS
See June 9-13 for address

OCTOBER 20

HOW TO PUBLISH YOUR PHOTOS
Rahn Engle
PHOTOSEARCH INTERNATIONAL
Box 6
Star Prairie, Wisconsin 54026

OCTOBER 29-NOVEMBER 2

SUPER SEMINAR
See June 11-15

NOVEMBER

NOVEMBER 10

PHOTO SAFARI TO INDIA
(Tour Sariska Game Sanctuary, Bharatpur
Bird Sanctuary and Tiger Tops with Miriam
Austerman.)
PHOTO-JOURNEYS
See June 30 for address

NOVEMBER 12-16

SUPER SEMINARS
See June 11-15

NOVEMBER 18-25

HAITI PHOTOGRAPHY TRIP
(Camera techniques in the field. Includes
Cap Haitien.)
NEIL CHAPUT DE SAINTONGE PHOTOGRAPHY
WORKSHOPS
See June 9-13 for address

NOVEMBER 22-25

DEEPEST VALLEY: THE LONE PINE EXPERIENCE
(Sixth annual session at east wall of Sierra
Nevada. All formats.)
CHERRY MOUNTAIN SEMINARS
See August 21-24 for address

DECEMBER

DECEMBER 17-21

SOUTHERN FLORIDA BIRD PHOTOGRAPHY
WORKSHOP
(Visit Loxahatchee Refuge, The Everglades,
Corkscrew Swamp and Sanibel Island.)
WILDERNESS ADVENTURE
See August 6-10 for address

1980

JANUARY 7, 1980 or MARCH 24, 1980

EVENING PHOTOGRAPHIC WORKSHOPS
(Basic photography, basic portraiture, color
printing and black-and-white printing)
ANTONELLI SCHOOL OF PHOTOGRAPHY
See October 1 for address

SEMINARS & WORKSHOPS CALENDAR

CONTINUING EVENTS

APEIRON WORKSHOPS, INC.
Box 551 Silver Mountain Road
Millerton, New York 12546

ARTOGRAPHY ACADEMY OF
PHOTOGRAPHIC ARTS
5352 Laurel Canyon Boulevard
North Hollywood, California 91607

DEMIDJI STATE UNIVERSITY
Communications Media Department
Demidji, Minnesota 56601

BROOKS INSTITUTE OF PHOTOGRAPHY
2190 Alston Road
Santa Barbara, California 93103

CALIFORNIA COLLEGE OF ARTS & CRAFTS
SUMMER PROGRAM
5212 Broadway
Oakland, California 94618

CREATIVE PHOTOGRAPHY WORKSHOP
4309 Winfield Scott Plaza
Scottsdale, Arizona 85251

DELUXE COLOR, INC.
27 West 27th Street
New York, New York 10001

DOUGLIS VISUAL WORKSHOPS
212 S. Chester Road
Swarthmore, Pennsylvania 19081

EASTMAN KODAK COMPANY
Department 053
343 State Street
Rochester, New York 14650

EGON EGONE
14 Embassy Road
Brighton, Massachusetts 02135

ESSEX PHOTOGRAPHIC WORKSHOP
Canoma Point Road
Essex, Massachusetts 01929

THE FILM INSTITUTE
P.O. Box 6651
Cleveland, Ohio 44101

FISHBACK SCHOOL OF PHOTOGRAPHY
3307 Broadway
Sacramento, California 95817

FRIENDS OF PHOTOGRAPHY
P.O. Box 239
Carmel, California 93921

GERMAIN SCHOOL OF PHOTOGRAPHY
Department H88, 225 Broadway
New York, New York 10007

PROF. M. GIBSON
Box 590
Cave Creek, Arizona 85331

THE GILLETTE WORKSHOP OF
PHOTOGRAPHY
498 N. McPherson
Fort Bragg, California 95437

ROBERT GORRILL WORKSHOPS
70 Gladstone Street
Squantum, Massachusetts 02171

GRAFFIX-CONTINENTAL STUDIOS
Box 547
Lisle, Illinois 60532

HASSELBLAD PHOTOGRAPHY SEMINAR
(travels around U.S.)
c/o BRAUN NORTH AMERICA
55 Cambridge Parkway
Cambridge, Massachusetts 02142

ICON AUDIO/VISUAL WORKSHOPS
Old Carriage House—Main Street
Yaphank, New York 11980

INTERNATIONAL CENTER OF PHOTOGRAPHY
1130 Fifth Avenue
New York, New York 10028

ALAN LOWY'S GLAMOUR PORTRAIT
LIGHTING COURSE
Photo/Art Supply Centre
19151 Meridian at 7 Mile
Livonia, Michigan 48152

THE MAINE PHOTOGRAPHIC WORKSHOP
Rockport, Maine 04846

MARITIME PHOTOGRAPHIC WORKSHOPS
University of New Brunswick
Department of Extension & Summer
Sessions
P.O. Box 4400
Fredericton, N.B.
E3B 5A3 Canada

NATURE PHOTOGRAPHY OF AMERICA
P.O. Box 6
Teton Village, Wyoming 83025

NEW YORK INSTITUTE OF PHOTOGRAPHY
263 Ninth Avenue
New York, New York 10001

THE NIKON SCHOOL OF PHOTOGRAPHY
(travels around U.S.)
623 Stewart Avenue
Garden City, New York 11530

OHIO INSTITUTE OF PHOTOGRAPHY
2029 Edgetield Road
Dayton, Ohio 45439

OREGON PHOTOGRAPHY WORKSHOP
3241 Donald Street
Eugene, Oregon 97405

PETERS VALLEY
Layton, New Jersey 07851

PHOTO FLOW: A SUMMER FESTIVAL
(Woodstock, New York)
Jill Lynne
31 Bank Street, Apt. 2R
New York City, New York 10014

PHOTOGRAPHICS ENTERPRISES
110-45 71st Road
Forest Hills, New York 11375

PHOTO GRAPHICS WORKSHOP
212 Elm Street
New Canaan, Connecticut 06840

PHOTOGRAPHY/WRITING/HISTORY
WORKSHOPS
CEPA Gallery
30 Essex Street
Buffalo, New York 14213

PHOTOSEARCH INTERNATIONAL
Box 6
Star Prairie, Wisconsin 54026

RHODE ISLAND SCHOOL OF PHOTOGRAPHY
241 Webster Avenue
Providence, Rhode Island 02909

THE SILVER EYE PHOTOGRAPHIC
WORKSHOPS
631 Gettysburg Street
Pittsburgh, Pennsylvania 15206

SOUTHERN SCHOOL OF PHOTOGRAPHY
517 Thornhill Road
Fort Walton Beach, Florida 32548

SUMMERVAIL WORKSHOP
Box 1114
Vail, Colorado 81657

SUN VALLEY CENTER FOR THE ARTS AND
HUMANITIES
Box 656
Sun Valley, Idaho 83353

TRAVEL WITH A CAMERA*
114 Hilary Circle
New Rochelle, New York 10804

UNIVERSITY OF CALIFORNIA EXTENSION
Santa Cruz, California 95064

GERI VARTANIAN PHOTOGRAPHIC SEMINARS
150 E. Hartsdale Avenue
Hartsdale, New York 10530

VERMONT PHOTOGRAPHIC
WORKSHOPS, INC.
Bondville, Vermont 05340

VICTOR SCHOOL
Route 1, Box 145
Carmel, California 93923
After June 20:
P.O. Box 145
Victor, Colorado 80860

VISUAL STUDIES WORKSHOP
31 Prince Street
Rochester, New York 14607

WSP PHOTOGRAPHY WORKSHOPS
4823 Fairmont Avenue
Bethesda, Maryland 20014

THE WAKEFIELD STUDIO
R.F.D. #3 Box 105
Dexter, Maine 04930

WINONA SCHOOL OF PROFESSIONAL
PHOTOGRAPHY
1201 College Avenue
Winona Lake, Indiana 46590

TAKE A CLOSE LOOK AT UNDERWATER PHOTOGRAPHY IN SKIN DIVER.

The May issue of SKIN DIVER magazine announces its first special issue devoted to underwater photography! Readers will find beautiful full-color photos and how-to articles by the experts.

Paul Tzimoulis and Jim and Kathy Church present underwater photographic techniques; the newest camera equipment and how to use it! Every month, SKIN DIVER includes a

feature on underwater photography along with its exciting format of wreck diving, fish identification, shell collecting, marine ecology, reef exploration, travel guides that take you 'round the world, and so much more!

Let SKIN DIVER assist you in capturing the undersea world, too! It's on sale now at newsstands or, you may subscribe with the coupon.

Please ☐ enter or ☐ extend my subscription to SKIN DIVER for 1 year for only \$10.95* (a \$7.05 savings off the combined newsstand cost of \$18 for 12 issues.) ☐ My \$10.95 is enclosed. ☐ Bill me (U.S. only.) G-33

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THE Y.O.B. SYSTEM, PART IV

APPLYING THE SYSTEM TO EXPOSURE TECHNIQUE

BY PARRY C. YOB

In the three previous articles of this series, I've taken you through determining your enlarger's requirements, construction and photographing of the evaluator, and finally the processing of negatives.

From my own experience it has usually been necessary to increase negative development times to obtain the density ranges required by the enlarger and indicated by the absolute standard. I neglected to make clear, however, that if your initial enlargements of evaluator negatives, exposed and processed to the manufacturer's recommendation, yield a border white in the Y_m area when the print is exposed to give the paper's maximum black in the B area, you should test to be sure that you are not overdeveloping the negatives. To do this, simply make additional prints, opening the enlarger lens a half stop at a time until you can see the first faint difference between the Y_m print area and the adjacent border. Remember that one full stop is the equivalent of 0.3 change in negative density, and therefore if you have to open more than $\frac{1}{2}$ stop or increase exposure by more than 50 percent to show a darkening of the Y_m area, appropriately reduce your development time.

Now, on to practical things. You've probably wondered just how this is going to modify your exposure techniques. The truth is, if you've developed good exposure techniques already, you won't have to make any drastic changes, but you can probably simplify what you have been doing. First, a word for Zone System users.

I have no quarrel with the Zone System, but like many photographers, I cannot recognize 10 or 11 zones in a scene unless they are arranged like a gray scale, and I see light values only



© Parry C. Yob 1979

in relation to whatever other values appear in the scene. Place a gray card on a white background and it appears to be dark, but place it on a black background and it will appear to be very light. Look at the street paved with asphalt and the sidewalk beside it and you may have trouble deciding which is a middle gray or a Zone V. Avoid the choice by metering the clear north sky, but what if the sky is not clear? Finally, unless you are using a view camera with sheet film, there's the problem of adjusting development to suit the scene. If you must increase development for flat scenes, decrease development for contrasty scenes, and give normal development for normal scenes, you must either carry three 35mm cameras, or you must shoot a whole roll of each type of scene. The

basic difference between the Yob System and the Zone System is that in the Yob System no changes are ordinarily made in film development regardless of what tonal range may be found in any given scene, and any given roll of film may be exposed to a wide variety of scenes from flat to contrasty. In addition, no records need be kept as to what is on any sheet of cut film since they are all given the same development by the Yob System.

MAKING CORRECT EXPOSURES

Most of the 35mm cameras with a through-the-lens metering system are of the averaging type, but for those of the spot-metering type, there will be more information given under the discussion of spot meters. An averaging meter is adjusted to the "middle gray" value as imagined by the designer. It assumes that the value between pure white and pure black is some sort of average middle gray value, sometimes taken as the reflectance of an 18-percent standard gray card. If you were to take a reading from such a card, this would be the equivalent of reading the Y_g value of the Yob System. In black-and-white photography this would also result in a one-stop underexposure. If the scene does not have a wide range of values, and most scenes do not, the latitude of the film takes care of this error, and a usable negative is still produced. With the Yob System, which is tuned to an area that is one full tone darker than the gray card, one would at first assume that a through-the-lens metering system viewing an average scene would automatically assume that it was looking at a darker area and underexpose by one full stop, but it does not work out that way in practice. A full explanation is contained in what I call the Advanced

Y.O.B SYSTEM

Yob System, but briefly the situation is this: The evaluator is a technical device designed only for the purpose of determining what processing adjustments are necessary to match your negatives to the absolute standard for your particular enlarger/paper combination, and the use of the O reading is compensated for in the overall system. So, for the average front- or side-light scene, you simply use your averaging through-the-lens meter in the normal way.

What about abnormal scenes? Snow scenes are one of the most common abnormal scenes. If more than half the camera's field of view is snow, particularly sunlit white snow, you have two simple options. The first and easiest is to take a reading of the snow itself, then open up the lens three full stops or slow the shutter by three full steps from the snow reading. That is, if you have an ASA 125 film in the camera and the snow reading is $f/16$ at $1/1000$, you slow the camera shutter three steps to $1/125$. The second option is to take a reading of the snow in a shadow area and use that reading. Likewise, if you are taking a picture of a white church and cannot back up to where the building does not dominate the reading, simply take a reading of a white shadow area and use that reading. If you can't get close to a shadow for a reading, simply read the white of the church and open up three stops.

Dark areas and night scenes where the averaging through-the-lens meter gives no reading at all are also abnormal shooting situations. Here again the Yob System is simple. Pick the lightest object you can get a reading of other than a window or a light bulb, make your reading and open up three stops. Just remember that in the print that light area will be represented as border white. Now don't start confusing yourself with decisions about the fact that you don't really want that light spot to print pure white. Such attempted adjustments are folly because the human eye is not that good a judge of values, and since your meter will not read the lower values, you can't make an intelligent decision anyway. At this point you may think I've taken a slapdash attitude, so let me tell you that what I've advocated is the same technique Ansel Adams used in estimating the exposure for his most famous picture, *Moonrise, Hernandez, New Mexico*. The method was different, but Adams knew the number of foot-candles on the moon



(which was too far away to read without a 1° meter), and he simply adjusted his meter's calculator to that value and opened up the appropriate number of stops. His ability to work rapidly got that picture, and I've given you this simple approach so you too can work fast in the fading light of those once-in-a-lifetime situations.

Keep in mind that when I speak of taking a reading of a light area with a through-the-lens system, the camera should be close enough to the area so that the entire frame is filled without the camera casting a shadow on the metered area.

Finally we come to the problem of photographing large dark areas as the total scene, a large part of the scene, or as backlit areas. If you've been keeping records of your evaluator exposures, the first instinct would be to make a reading of the large dark area and close the lens by about five stops. While there will usually be a five-stop difference between the O and B readings, we must remember that the B area represents the darkest shadow of a normal scene and is an area where no detail whatever is to be recorded. Only in very unusual circumstances would a through-the-lens meter record these small areas in a real scene. This makes for a great simplification of the Yob System. If you are forced to make a reading from what you would normally think of as a dark shadow or black area, you close the lens three stops, not five. Since you open it three stops when taking a reading from the pure white area and close it three stops when taking a reading from a black area, it is very easy to remember. In the upcoming article, I'll try to make the technical justification more graphic, but for now you can just remember the three-stop rule for black-and-white photography.

Backlighting situations can be handled in a number of ways. Obviously, if you are making a portrait of a model who has her back to the sun, you simply take a close-up meter reading of



1. This is a straight print on Kodak No. 2 Polycontrast Rapid fiber-base paper. Shot was taken on 4x5 sheet Tri-X Professional Film at $f/16$ for $1/30$ with a No. 25 red (A) filter to darken the sky. Film was developed in Kodak Microdol-X to match enlarger characteristics. Brightest areas of the wood read 17 on the 1° meter and were taken as Y_m value. Meter calculator was set at 14 by the three-stop method, and an additional three stops filter factor was added. (Methods of determining filter factors by the Yob System will be discussed in "The Yob System, Part V," next month.)

2. Photo is from a 6x7cm negative on Kodak 120 Plus-X Professional Film. Y_m brightest wood highlights read 17 on the 1° meter. Three-stop method gave 14 for the O-reading. Darkest shadows read 8. ASA 125 was used after a $1/2$ -stop correction for meter calibration. Exposure was $f/11$ for $1/30$ through a No. 25 red (A) filter. Film was developed 15 minutes in Microdol-X at $70^\circ F$ per evaluator tests. Shot was printed on Polycontrast Rapid fiber-base paper through a No. 2 filter for 25 seconds at $f/16$, factor-developed in Kodak D-72 $1:2$. No dodging was used to retain wood detail in shadow areas.

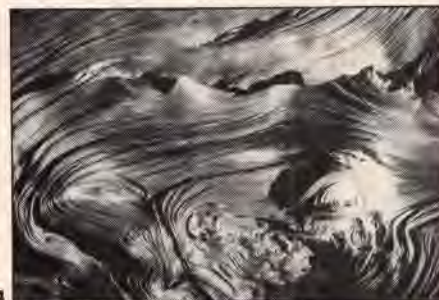
3. This is an extreme case. Almost directly backlit, the darkest shadow areas could not be read with the through-the-lens metering system of my Pentax Spotmatic-F. A general reading was made through a No. 8 (K-2) yellow filter, reading only the overall shaded side of the rotting wood. With the negative printed so darkest shadow is at the paper's maximum black for a B value, distant snow is just at a Y_m of border white on this enlargement. Although reproduction will not show it, the large shadow area still retains detail in the lower right. Kodak 35mm Tri-X film was developed per the Yob System.

4. Shot in proper lighting and processed to Yob System specs, this shot of unfiltered wood grain shows detail not possible under the extreme conditions of photo No. 3.

her face and shoot with no correction whatever. If you are making a full-figure shot of the same model with her back to the sun, you still use the close-up facial reading without correction. With all other situations except where you are shooting sunsets or where the sun or light source is within the camera's field of view, you can still use the three-stop rule quite effectively. That is, you take an overall reading of the light sky area and open up three stops, or you take an overall reading of the shadow area and close down three stops. Other standard well-known



ALL PHOTOS BY THE AUTHOR



methods work perfectly well when your ASA settings and film development have been adjusted by the Yob System, but here the idea is to simplify things.

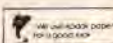
All of the foregoing statements apply equally well to handheld averaging meters, and the application is the same. For those who own 1° spot meters, the application is also the same, but easier since you don't have to move up for selective readings. However, there are some things you should be aware of, particularly if you've used the Zone System or one of the modifications of that system. With a 1° meter, you have three options and a host of alternatives that are beyond the scope of this series. First, you can try and pick out the elusive O area of your photo, which now becomes middle gray. The problem here is, do you pick the north sky, the oiled highway, the green grass, or a rock you arbitrarily think is an O area of the Yob System? If you are very good at "placement" and have a good eye, this works fine. Second, you can average the reading between the brightest object and the darkest shadow reading, and call that an O area. Third, you can use the three-stop rule as outlined for through-the-lens meters.

One of the great old myths of photography is that you should "expose for the shadows and develop for the

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12"	1.44	31"	3.72
13"	1.56	32"	3.84
14"	1.68	33"	3.96
15"	1.80	34"	4.08
16"	1.92	35"	4.20
17"	2.04	36"	4.32
18"	2.16	37"	4.44
19"	2.28	38"	4.56
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highlights." In truth this is a sure-fire method of getting muddy negatives, particularly with modern films that have reduced silver content. Exposing for the shadows by light meter would mean normal exposure for an area corresponding to an O area, but it would mean a 3-5-stop overexposure if darker shadow areas were taken. My tests have shown that increasing exposure is not the best way to increase the density of the Y_m areas, and decreasing development to compensate would just decrease these higher densities. However, increased development will increase the density of any film area that has received more than threshold exposure. Thus use of an O-area reading—a white area reading plus three stops—or a large open shadow area minus three stops, in combination with processing times derived from the absolute standard and the evaluator, will prevent formation of weak highlight areas when working with a 1° meter.

Manuals that accompany 1° meters often include techniques such as "weighted averaging," etc., but here again the photographer gets bogged down in arithmetic while the picture gets away. There is, however, a method I find useful under difficult conditions out of doors. This kind of situation has many small bright areas, such as distant snow banks on mountains, that are too small to accurately measure with the 1° meter. Here I scan the picture area rapidly, using the meter to find the darkest shadow that is large enough to accurately measure, then I close the lens by five stops. This method ensures that you will maintain adequate highlight density provided your scene has a range of eight or nine stops.

What if your scene has a range of only three stops so that the brightest object reads 13 and the darkest object registers 11? Just take the average reading, which is 12, and get everything on the film. In a situation like this, extended development will not spread the range enough to matter. This is not to say that a sheet-film user could not go through an involved process of gross underexposure followed by drastic overdevelopment and obtain a density difference of 1.5 between the darkest and lightest areas of the negative; but this is a situation where paper grades are used for darkroom rescue operations, not simple first aid. Here we would simply use our through-the-lens averaging meter system or 1° me-



5. Since the other photos were made at altitudes of 10,000 to 12,000 feet, here's a straight through-the-lens metered 35mm sea-level shot made with a No. 25 filter and system processed. The small half-round spot near the top is the moon.

ter average reading and develop the roll to the normal Yob System time and temperature. Then we would be free to print on a grade No. 6 paper or even Kodalith paper. The negative would preserve all the values, and no time would be lost in recording meter readings, processing suggestions or other time-consuming bookkeeping. Keep in mind that this is a point-and-shoot system where ordinarily no field exposure record will be made.

BRACKETING

The bracketing of exposures is a time-honored tradition I've abandoned since using the Yob System. For me the best cloud formations, the best action, and the otherwise perfect negative always seemed to fall on the bracketing negative that was farthest from the correct exposure. If a dust speck, scratch or air bell struck one negative, it was always on the correctly exposed negative, which usually turned out to be in the middle of the bracketing. Now I shoot duplicate negatives or sometimes triplicate negatives at the same Yob System exposure if the situation permits, but I don't fuss with bracketing. You may elect to bracket, and we won't take away your evaluator, but you won't be taking full advantage of the system until you've learned to do without this crutch.

Next month we will cover filters (their use with the Yob System and calculating filter factors), electronic flash, and preliminaries of printing your Yob System negatives. □

CONTEST NEWS

(Continued from page 18)

The South Shields Photographic Society announces its **1979 International Exhibition of Pictorial Photography**. Black-and-white and color prints will be accepted until June 1, 1979. For more information and an entry blank write H. M. Oley; 8, Windermere Crescent; South Shields, Tyne & Wear; England, NE34 0DN.

* * *

The National Artists' Alliance, Inc., announces its first nationwide juried photography exhibition, entitled **American Vision**. All interested photographers are invited to submit a minimum of two unframed photographs; black-and-white and color prints and color slides will be accepted (entries may comprise any combination of the above). Closing date is May 26, 1979. For more information write National Artists' Alliance, Inc., P.O. Box 1662, New Haven, Connecticut 06507.

* * *

The International Photographic Council announces its **"We the Peo-**

ple" Competition. Each applicant may submit up to two photographs, one instant and/or one snapshot, which may be no larger than 5x7 inches. Entry blanks are available from participating photo retailers and photofinishers; entries are submitted through these dealers, who will send them to various photo trade publications. Deadline for entries is May 1, 1979.

* * *

The Motion Picture Division of the Photographic Society of America (PSA) announces the **Second Annual Teenage Film Festival Competition**. Entries may be submitted by students in the United States and Canada enrolled in any school, public or private, in the ninth through twelfth grades. Entry films may be in regular 8, super 8 or 16mm; in black-and-white or color; silent or sound; and the sound may be optical, magnetic or sound-on-tape. Film's running time should not exceed 30 minutes. Closing date for entries is May 15, 1979. For complete rules and entry forms write Peter B. Crombie, PSA/MPD Chairman; Teenage Film Festival; 5163 West 88th Street; Oak Lawn, Illinois 60453.

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□ When adding up my yearly subscription costs and membership dues—an annual ritual at tax time—I make a mental note to seriously consider trimming this ever-growing expense. So, for me to plunge into another organization with its attendant dues and responsibilities might seem, at first glance, to be economically irresponsible.

What led to this apparently capricious move was a recognized need on my part to gain more understanding of the value of photography in the educational curriculum. For such understanding, one must consider contemporary research on visual matters. I was elated to discover an organization serving the interests of persons who, like myself, were concerned with the educational significance of the visual image. So, I joined.

The International Visual Literacy Association (IVLA) is a relatively new organization, according to past president and current chairman of the 1979 conference, Richard Ingalls. He joined this group soon after its first meeting in 1969, a meeting that was an outgrowth of concern about a concept termed "visual literacy." Two years earlier, John L. Debes III, then of the Eastman Kodak Company, had put together photo story discovery sets—small sets of cards, each card having a different photo image. Depending on the children's lining up of the cards, different story statements could be made from the set. This supported Debes' concept that each card image was a statement and, further, that combinations of the cards produced more complex statements. In 1969 Debes called together different educational specialists to further explore this concept of visual literacy as a separate field of study. Publicized results of the first meeting stimulated experiments with this educational technique which led eventually to the forming of the IVLA.

In a recent interview, Richard Ingalls, Instructional Development Specialist at Grossmont College, El Cajon, California, discussed visual literacy. He commented, "I am often asked for a succinct definition but I cannot be precise. The idea of visual literacy is constantly being redefined. Basically, it deals with visual competency—the ability to communicate thoughts and responses through visual means. We are increasingly becoming a visually saturated society. On an average, our students watch 20,000 hours of TV before they graduate from high school. When considering that the typical 18 year old will have had 12,000 hours of school, it is obvious that he has

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ROBERT ROUTH

VISUAL LITERACY IS YOUR BUSINESS

received much more information through a highly visual medium than from a more traditional, book-oriented environment."

The student, through visual means, is being told many things that will have a profound effect on his development. "He is being told what products to buy, with whom to associate, what material things he should want out of life, what kinds of job expectations he should have, what his home should look like, and how he should



Richard Ingalls, chairman of the 11th Annual Conference on Visual Literacy, which is to be held this year.

relate to his girlfriend—information presented from a biased, commercial point of view more concerned with the moving of merchandise than the well-being of the viewer."

Such biases apply to other advertising media, according to Ingalls, including newspapers, billboards and magazines. Visual images are a prime perceptual input influencing every aspect of our lives.

IVLA presentations at annual conferences are revealing significant classroom results. Ingalls gave an example: "Students who incorporated writing and videotape were showing marked gains in traditional subject matter. Many had been turned off to school. However, when handed movie film, video tape or slide-making equipment, and given a project to produce and perform in a play to be shown to their classmates, these stu-

dents blossomed. They became interested in spelling, writing coherent sentences, and mastering the math that would improve their photography. Scripts had to be written, friends had to be talked to, and all those everyday things that teachers had been trying to get students involved in suddenly became necessary to complete the project.

"For many reasons," Ingalls continued, "some students are reluctant to speak. But when presented with a photo-story discovery set or a camera, they could visually sequence a story and would often become so excited with this visual story that they could babble on and on. Many students have difficulty in keeping their eye coordination sufficiently strong to help them read, yet viewing the world through the limits of a camera viewfinder is a tremendous exercise in training eyes to focus on one idea at a time. Visual literacy includes visual and manipulative means of learning; thus, the student who looks through the viewfinder, clicks the shutter, arranges slides in a sequence, perhaps even narrates a tape and pulses it in such a way as to advance the slides, is involved with many activities beyond just looking at subjects. And because of this coordination of effort, he is able to articulate well to his fellow students. These experiences translate directly into traditional reading, writing and arithmetic curricula."

By dealing intensively with such concerns, IVLA has much to offer the educational community. To understand the communicative implications of the photographic image, it is necessary to broaden the education of photo students. Too often, students regard the technical accomplishment of an assignment as the major objective of the course rather than really penetrating into the visual world as a carrier of our culture. It seems to me that IVLA offers an answer to an often-missing ingredient in the photographic curriculum—an understanding of the image itself.

Annual IVLA conferences bring together teachers and researchers from many parts of the world to present research papers and outstanding programs. The 11th Annual Conference on Visual Literacy will be held in Anaheim, California from October 31 to November 3, 1979. Current IVLA President, Mrs. Lida Cochran (University of Iowa), joins Ingalls in extending to readers an invitation to this conference. For information write: Robert D. Routh, Conference Program Chairman, IVLA, Photography Area, California State University, Long Beach, California 90840. □

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BY PETER B. AND HARRIET KAPLAN

If you can't afford to spend thousands of dollars to go on safari in Africa in order to get great wildlife photographs, you'll find that within an hour's drive of most major cities in the United States you can see wildlife from all continents. Some animals even look as if they are in their natural habitat. A zoo or wildlife park can give you the opportunity to photograph many different kinds of animals in a concentrated area.

EQUIPMENT

Let's begin by discussing what equipment you'll need. To be on the safe side I advise you take along all your lenses. A good sturdy lightweight tripod—preferably black—is essential. Black is less noticeable in reflections in glass. If you don't have a black tripod, you may paint it black, use black tape, or wrap it with black cloth.

In order to make it easier to carry the tripod, I use automobile straps to attach D rings to the upper and lower parts of the tripod leg. To those I hook a regular camera strap, which enables me to carry the tripod over my shoulder.

Fishing vests are not only for fishermen. I usually wear one when shooting in warm weather. In the pockets I carry filters, film and the smaller lenses, from 180mm on down. Each of the larger lenses is carried in its own leather case over my shoulder.

A motor drive is not absolutely necessary, but animal behavior is spontaneous, and motor-driven cameras make it easier to photograph birds in flight and moving animals.

Bellows, extension rings or tubes are good for photographing small animals or birds. Most people use a bellows to photograph small objects they can get close to, but you can also use a bellows with a 200mm or a 300mm lens. Placing the bellows between the camera and a long lens makes it possible to stand farther away from your subject and still get a close-up shot. Extension rings can be used in the same way. When I'm photographing snakes, for example, I prefer to use an 85mm or 180mm lens

with an E-2 extension ring.

There are many small automatic flash units available with rechargeable nickel-cadmium batteries and accessory professional battery packs that can be carried over your shoulder or on your belt. This allows you to shoot almost as fast as a motor drive permits. Make sure you have two or three spare batteries if you plan to use the flash often. Run tests on your flash unit with various lenses and extension tubes before you go to the zoo so you know how to get that important photograph properly exposed when the time comes. Bracketing is not only expensive, but when working with wildlife, many times you are able to get only one good photograph of a particular animal. You wouldn't want to waste it by over- or underexposing it.

I prefer to use Kodak Kodachrome 64 Film, but I always carry Kodak Ektachrome Film for those occasions when I need extra speed. When I photograph at the World of Darkness at the Bronx Zoo, I use Ektachrome film pushed to E.I. 4000.

Always carry the following in your camera bag: spare batteries (even though you take care to change your batteries twice a year); lens cleaning fluid and tissues (when you're working fast, mishaps can happen, such as getting a fingerprint on the lens); an indelible felt-tip pen for marking on film or on film cans such notations as special development requirements or the number of exposures used should you switch films after using only half a roll.

TECHNIQUES

Now that you have all the essential equipment, here are some techniques to help you eliminate the various barriers you may encounter when photographing at zoos.

Bars and wires pose no problem if you use your lenses properly. Use your long lenses when the subject is not close to the bars. Shooting wide open enables you to focus on your subject while eliminating the foreground and background. It is sometimes necessary to close down one or two stops in

order to get the proper depth of field, but in doing this you should use the depth-of-field preview button to make sure the bars are not in focus. Try to avoid shooting through bars with sunlight falling on them. This will give you highlighted blurs in the photograph. If there is no way to avoid sunlight, try to hold up an object such as a book, coat or hat to cast a shadow on the bars. When an animal is situated closed to the bars, use a wide-angle lens, again wide open in order to keep the depth of field shallow. My own favorite is a 35mm lens. Place the lens in between the bars, or if this is not possible, place it up against the bars, focusing on the animal. Usually this will eliminate the bars and give you an unusual portrait of the animal with some of its surroundings.

There are many techniques to use when photographing wildlife through glass, depending on the animal's position inside the enclosure. First of all, any lettering on the face of your lens and camera should be painted black with Kodak Brushing Lacquer

1. Siberian tiger was photographed in a wildlife park through a car window, which necessitated using a CC100 magenta filter to correct for glass tinting. A 300mm telephoto lens was used to make the exposure at f/8 for 1/125 second.
2. Swans were photographed with a 180mm lens placed over fence surrounding them at the Bronx Zoo; exposure was 1/5.6 for 1/125.
3. A 300mm telephoto lens was used to photograph condor through wire fence at the Cincinnati Zoo. Lens was placed right up to wire and large aperture was used to blur wire to the point where it disappears. Exposure was 1/2.8 for 1/125.
4. Camera with 300mm lens was set up on a tripod to photograph wolves over fence at the Bronx Zoo. Exposure was 1/8 for 1/500.
5. Lens was pressed against munching snake's glass cage to avoid on-camera flash's reflection. Shot was taken at the Bronx Zoo; exposure was automatic.
6. Candid shot of prairie dog at Catskill Game Farm was made possible by shooting with a 300mm telephoto lens; exposure was 1/8 for 1/250.
7. Tripod-mounted camera with 500mm telephoto lens was braced with sandbag to photograph panda at the National Zoo; exposure was 1/5 for 1/125.
8. Close-up shot of zebra at San Diego Zoo was made using a 300mm telephoto lens; exposure was 1/2.8 for 1/125.
9. It's possible to get very close to wild animals such as rhinoceroses when using a long telephoto lens. A 300mm lens was used to take this picture at the Catskill Game Farm; exposure was 1/8 for 1/250.



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ZOO PHOTOGRAPHS

No. 4 dull black (catalog No. 195 6358). This prevents reflections. If possible, place the lens flush against the glass. This will enable you to use the glass as a tripod in low-light situations. If the animal is not in a position for you to photograph it with your lens flat against the glass, and you'd like to prevent reflections of yourself and your camera in the glass, make a hole in the center of a black piece of cardboard or a black rubber plunger and place your lens through it. When shooting with flash through glass, put your camera against the glass to prevent the flash's highlight bouncing back into the lens. If you can't do this, either remove the flash from the camera and hold it at a 45° angle from your camera, or put a plunger around the lens and hold the plunger against the glass, which will prevent the flash light from bouncing back into the lens.

When driving through a wildlife park, you must often photograph through the window of your car. You should never roll your window down as you may cause harm to the animals and yourself. One rule stands above all others, and that is that no photograph is worth injuring an animal for. So the problem you may subsequently face is having to photograph through a tinted window. Depending upon how your window glass is tinted, you can use correction filters to get the right color balance. I use a CC10 magenta filter to correct for the green tint of my car's windows. Here again you can use your window as a tripod.

When using a long lens on a tripod, use a bean bag placed on top of the lens. This steadies the lens and prevents vibrations. You may also find it useful on shorter lenses when shooting at slower speeds. I find I can make exposures as slow as one-half second without getting any blurring.

You can attract the animal's attention by clapping or making a distracting noise. This will usually cause the creature to stop and look at you as it is curious to see where the sound is coming from.

It is important to wear comfortable clothing. Dress in layers in winter as it is better to take clothing off than to be cold; and always carry cream to protect lips and prevent chapping. Wear woolen gloves with the fingertips cut off to allow you to photograph and still keep hands warm at the same time. It is important to be as

comfortable as you can. In the summer wear shorts, but carry something warmer like a nylon windbreaker in your camera bag. If you spend the entire day at the zoo, you never know if the weather is going to change.

Hunger is something you can't control and can interfere with your shooting. I always take something to eat for quick energy. I want to make sure I don't lose that photograph I've been waiting hours to take while I'm getting a quick bite to eat.

Take advantage of exhibits at zoos where bars and wires are not a hindrance. A walk-in cage gives you the opportunity to study the wildlife. Spend time there and let the animal get used to your presence. A number of zoos have these type of exhibits, such as the Bronx Zoo, New York City; the Arizona-Sonora Desert Museum, Tucson, Arizona; the San Diego Zoo, California; and the National Zoo, Washington, D.C., to name a few.

Many zoos are now displaying wildlife in more educational exhibits featuring animals of the same geographical area together. The Bronx Zoo has an African Plains exhibit showing predators and prey separated only by a moat. You can use a long lens and photograph a lion watching its natural prey.

Zoos make it possible for you to see and photograph endangered animals and ones that have become extinct in the wild, such as the giant pandas, Przewalski horses, Pere David deer and American bald eagles, among others.

Some amusement parks around the country have excellent wildlife exhibits, and in many zoos petting areas are available for children to touch and feed animals. There you can take extreme close-up photographs with a macro lens and show bold details.

Zoo keepers and trainers can be most helpful. They love their animals and have a wide range of knowledge about them. If you show a genuine interest, often they are eager to help you get a good photograph, sometimes even allowing you behind the scenes.

Most of all, when you're photographing at any wildlife park or zoo, obey *all* the rules and regulations. Do not put your lens through the bars of the cage of a dangerous animal, as you may go home minus a lens or, worse yet, an arm. Zoos are there for your enjoyment, and with a little patience, the right equipment, and proper techniques, you can take great wildlife photographs. □



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(Continued from page 32)



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Now You Can Rent Your Pictures!

Associated Photographers International announces a new concept in stock photo agencies —

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Of the millions of photos published each year, a significant percentage are rented through stock photo agencies. They are generally rented for one-time use by news media, book publishers, advertising agencies, greeting card, poster, record album, audio/visual companies etc.



Stock photo agencies rent "every-day" type pictures. Like this one (B/W), which earned \$50 for photographer David Cherkis of Los Angeles. It was used in a textbook.

Photographs are worth from \$25 to \$750 (B&W) to over \$1000 (Color) for one-time use — and more for extensive use, and re-use. Some photographers receive checks every month for pictures they shot years ago!



A stock photo agency rented this picture in color for a calendar. The photographer, Thomas Arledge of San Diego, CA, shared the \$400 payment.

Surprisingly, pictures that rent are often of ordinary subjects, many done by photographers with modest skills.

Until C/P/R there were a number of drawbacks in dealing with stock photo agencies. Most require that you leave your original pictures in their files for up to 5 years! To have your pictures considered you should be producing a large number of pictures regularly. And when a picture is rented, you split 50/50 with the agency.

Now C/P/R removes these obstacles and opens to you the world of extra income from renting your pictures.



As a 35mm slide this picture paid Mike Grogan of Greensboro, NC \$175 for use as a poster. Frames from the same shoot- ing rented for an additional \$375.

C/P/R does not keep your pictures! Instead information regarding them is fed into the C/P/R computer photobank. Under this arrangement, **not only do you not part with your pictures until they are rented, but you can market them elsewhere — including through other stock photo agencies!**

All photos shown were rented through stock photo agencies.



Audio-visual producers are another market serviced by photo agencies. This slide was rented 3 times and netted \$350 for George Thompson of Houston, TX. George has received \$980 from rentals over the past few years.

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GALLERY '79

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Black-and-white: There is no limit to the number of prints you may submit to *Gallery '79*, but they should be no larger than 11 × 14 inches and unmounted. Prints with white borders are preferred. Your name and address and all pertinent data must be printed on the back of each picture.

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Also, for any photograph in which a person or persons can be identified, the picture must be accompanied by a signed release from each recognizable individual. PhotoGraphic will pay \$25 for each picture published. Prints and transparencies are accepted for one-time use and will be returned after publication date. □

1. Concentric rings of dark and light add a propelling direction to Nedra Westwater's photo of the Cloisters of Khartoum University in Sudan. Image was recorded with a Nikon F2, 35mm Nikkor lens and Ilford FP4 Film.

2. An unusual viewpoint sometimes gives mundane objects a new meaning as in this photo of vertically ascending stairs taken by the photographic team of David Grossman and Cynthia Anderson. Shot taken with Minolta SR-T101, 50mm Rokkor lens and Kodak Tri-X Film.



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GALLERY '79

1. Ed Obuszewski used bright bold colors to give power and meaning to his composition. Image was recorded with Minolta SR-T101 fitted with a 55mm Rokkor lens and Kodak Kodachrome 64 Film.

2. J.E. Frederic made this unusual self-portrait with a homemade slit camera. Actually the camera is a Mamiya RB67 with a toy motor hooked up to a Graflex back to transport the Kodak Ektachrome 64 Professional Film past a tiny slit at the film plane. Since the film is moving past the "shutter" instead of vice versa, a panning motion will further stretch and undulate the singular image of the subject.

3. Sometimes the simplest of compositions are the most effective. Here, Tobias Haller has enhanced a rather ordinary scene by isolating simple shapes and exaggerating the color by shooting Eastman Color Negative Film, Type 5247 without a compensating filter. Image made with Rolleiflex SL-35M and 50mm Planar lens.

4. With a steady panning motion and a keen eye for the sport, F. William Parker was able to capture a high point in this race. Photograph was made with a Nikon FE, 135mm Nikkor lens and Kodak Ektachrome 200 Film pushed one f-stop.

5. The difference between taking pictures and making pictures is evidenced here by photographer Ric Somekh. The scene of women in a forest was made to appear dreamlike by shooting with plenty of diffusion material over the lens and using Kodak Ektachrome Infrared Film to render the image monochromatic. Photo made with Canon F-1 and 50mm Canon lens.



5





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Some eight years ago Joe Bailey and I coauthored *Glass, Brass & Chrome: The American 35mm Miniature Camera* (University of Oklahoma Press, Norman). When it appeared in 1972, the only other book available of interest to photographic collectors was Harry Gross' now-legendary *Antique & Classic Cameras*, published in 1965. Joe and I apparently started something, because that trickle has turned into a stream, and at the rate new volumes of interest to collectors are appearing these days, the stream will shortly turn into a river. Naturally, we're both delighted that we can lay claim (however spurious) to having helped pave the way for the many excellent works that have followed our act.

I've devoted very little space to book reviews in past columns, primarily because so many have appeared in the past couple years, that to give each one equal attention would turn the column into nothing more than a monthly book review section. But this month I want to focus your attention on three widely divergent volumes of interest to collectors and photographers.

The first may strike you as a strange choice, but *The Instant Image* (Edwin Land and the Polaroid Experience) by Mark Olshaker (Stein & Day, New York, 1978) is a pioneering work that will likely stand for many years as the definitive study of the genius behind Polaroid. Olshaker interweaves the story of Land the man, his concept of photography, and the instruments he brought forth from forays into his imagination, with the growth of "instant" photography.

It's all done in a lively yet scholarly manner that makes it difficult to put the book down—it's darn good reading. *The Instant Image* is a must for all those concerned with contemporary amateur photography and the directions in which it's heading. At the same time, collectors interested in Polaroid will find much of value concerning the research and development behind the major products that have turned photography into an experience for the masses. Olshaker deserves a hearty pat on the back for his effort, and far better sales than his book is likely to enjoy.

For those who count the Leica as one of their major joys in life, James L. Lager's follow-up volume to his earlier *Leica Illustrated Guide* is a definite must. His newest is entitled *Leica Illustrated Guide II: Lenses, Accessories and Special Models* (Morgan & Morgan, Dobbs Ferry, 1978). Considerably longer than his 50th anniversary tribute to the marque (256 vs. 64 pages), the softbound

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THREE FOR THE ROAD

book is the same 8½ × 11-inch size.

The result of much painstaking work on the part of the author, an acknowledged Leica expert, the book covers an amazing amount of the accessories produced for Leica cameras, many of which were manufactured in such limited quantities that they are virtually unknown, even to those who consider themselves well-informed on the subject. Lager not only describes a wide range of items, with particular attention to their sig-

that illustrate the differences? Only the die-hard Leica fan would be aware that so many different ones were available, and even he will probably be surprised to find out just how many there actually were. And that's only one example of the comprehensive nature of Lager's work.

Last but far from least comes a book that many of you have been waiting for. Unfortunately, *Zeiss Ikon Cameras 1926-39* is a small book (144 pages) and terribly overpriced. It was written by D. B. Tubbs, the English free-lance writer who translated Michel Auer's *The Illustrated History of the Camera, 1839 to the Present* into English. Published by Hove Camera Foto Books of London (the same people who brought us *Leica—the First 50 Years*), it sells for eight pounds abroad and up to \$24.95 in this country.

At a lesser price it would be a fascinating reference work, since Tubbs picked up most of his information from prewar Zeiss literature provided by the company. It covers the product line well enough but makes no attempt to give us any real insight into the thinking that produced so many of the period's genuine classics. Of greatest disappointment is the treatment of the 35mm Contax, which gave the Leica the best run for its money in the prewar days. Granted, the chapter does well enough when it comes to describing the operation of the camera, but provides us with no motivation for Zeiss' entry into the 35mm market other than the fact that there was room for a high-grade Zeiss 35mm in the marketplace.

The quality of the paper and printing is far above the usual offered by American publishers, but that's a small consolation to the reader who's parted with his money only to find that the most interesting part of the story is missing. The final 34 pages contain a reference list of the Zeiss Ikon cameras of the period, but there's no cross-indexing to refer you to the chapter and page where a particular camera is more fully discussed—it's hunt-and-peck all of the way.

Although this one will probably be eagerly sought by those Zeiss and Contax collectors who are deeply into their hobby, others will do well to look the book over carefully and ask themselves if they really need it before they spend the money. It's too bad, because not everyone who's qualified will have a chance to write on the subject, and this first book could have made a much greater contribution to the field of photographic history. □



Two "musts" and one "maybe" to grace the bookshelves of collectors.

nificance based on verified information, he also provides chapters devoted solely to the various engravings and other markings on certain Leicas that indicate ownership, purpose and even sales agencies; Leicas and their accessories manufactured for the German military during World War II; and unusual screw-mounting Leicas, M Leicas, and Leicaflex models not seen before.

It's an expensive volume at \$18.95, and you wish the publisher had seen fit to put at least a hardbound cover on it, but I suppose we're lucky to see it in print, even at the price. It's not the type of book you'd pick up for casual reading, like *The Instant Image*, but it's certain to fascinate even the non-Leica enthusiast. Where else could you possibly find every model of the universal viewfinder produced for the screw-mount cameras dated, described, compared and evaluated, along with pictures

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advertising index

Abbey Photo, Tenba Pro Pack	119
A.I.C. Photo, Inc.	86
Americolor, Inc.	103
Antonelli School of Photography	119
Artography Academy of PhotoGraphic Arts	116
Asanuma Corp.	19
Associated Photographers International	27, 110
Berkey Marketing Co., Inc.	6-7, 55, 85, 99
Beseler Photo Marketing Co., Inc.	41
Blackhawk Films, Inc.	116
Bogen Photo Corp.	67
Bridal Studios	116
Bronica, Div. E.P.O.I.	21
Camera Provisions	119
Calumet Scientific, Inc.	101
Copal Corp. of America	72
Canon, USA, Inc.	12-16
Contemporary Frame Co.	99
Creative Framemakers	107
Creative Photography	109
Crown Products, Div. Chilcote Co.	109
Eastman Kodak Co.	11, 60-61, Cover 4
Edwal	84
Elmo Manufacturing Corp.	69
Encyclopedia of Practical Photography	65
Fishback School of Photography	109
Fortune Photographic Products	114
Glory-B of Santa Barbara	114
Graphik Dimensions, Ltd.	101
Greatest Things Mfg. Co.	71
Hassleblad, Div. Braun North America	31
Ilford, Inc.	69
Kelly Color	116
K-M Enterprises	119
K-Mart	106
Konica Camera Corp.	55

Laurel Camera	114
Macmillan Books	9
Meisel Photochrome Corp.	119
Miller/Sountage	107
Minolta Corp.	38-39
National Camera	100
New York Institute of Photography	29
Nikon	Cover 2-1, 2, 46-47, 49
Novacon Products	109
Olden Camera & Lens Co.	116
Olympus Corp. of America	22-23, 34-35
Omega	85
Paterson, Div. Braun North America	58
Pentax Corp.	5, 120-Cover 3
Photo Aids	107
Photography by Lessnau	109
Photographer's Inventory	116
Photography Learning Systems	99
Photo Specialties Co.	116
Pierce Co.	107
Pioneer	84
Porter's Camera Store, Inc.	115
Pro Color, Inc.	109
Professor Bloodgood's Photographic Emporium	52
Pro Photo	99, 109
Retinachrome	108
Rhode Island School of Photography	114
Rolex Watch USA, Inc.	109
Schneider Corp. of America	52
Shutterbug Ads	109
Sigma, Div. E.P.O.I., Inc.	64
Slik	99
Sunpak	36-37
Superior Bulk Film	116
Testrite Instrument Co.	116
Time-Life Books	25
Total View Color Labs	116
Ultimate Experience	85
Visual Horizons	116
Vivitar Darkroom, Vivitar, Corp.	6-7, 50
Wedding Photographers of America, Inc.	72
W.S.P. Photo	119
Zone V	107

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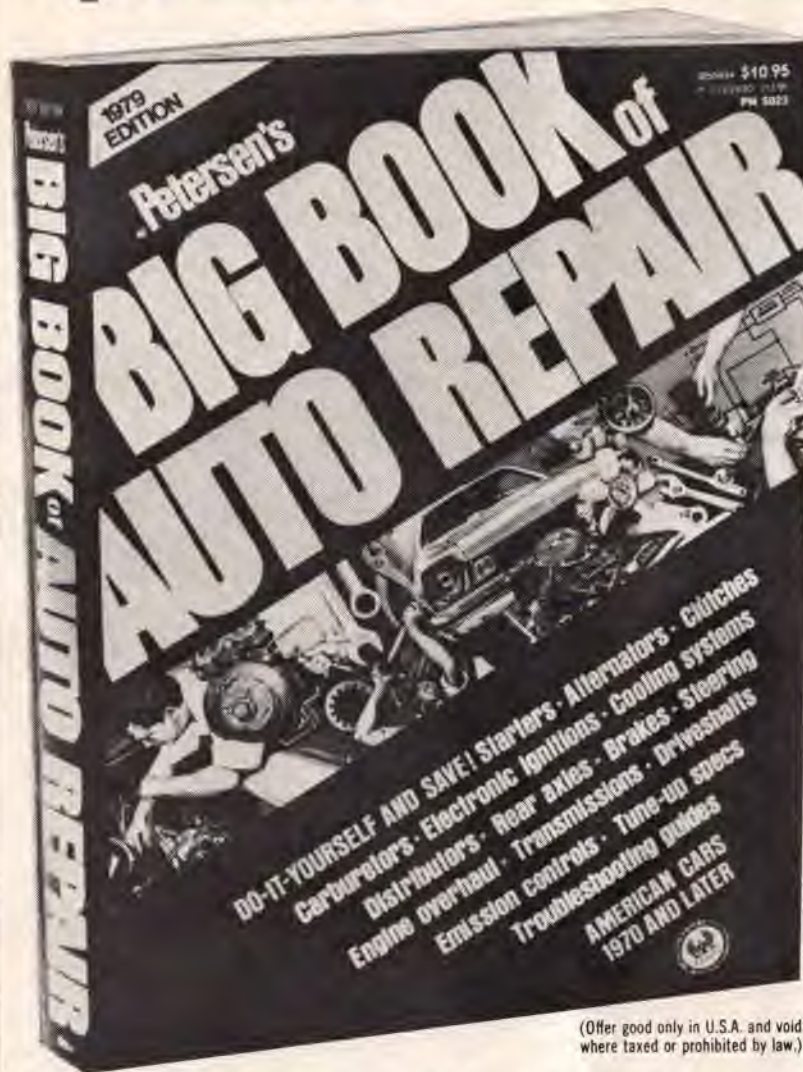
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☐ "Photography is new to me, and I really don't know too much about it. What I would like to know is what film would you recommend for the amateur? There are so many types of Kodak film (TX, PX, FX, ER 135, VPS 120, etc.) available and I am really confused as to what all the initials mean. I would also like to know what all the numbers on the side of the Kodak film box mean."—**Rosemary Rucki, Canonsburg, Pennsylvania.**

Taking first things first, I can't recommend a film to anyone unless I know what his or her specific needs are. For instance, do you want slides or color prints; do you shoot indoors or out; are the majority of your photos taken in low light or bright light? These are all questions that need answering before you can intelligently choose the right film.

If you want 35mm color negatives, from which color prints can be made, Kodak has three films you can choose from. Kodacolor II (C) is a fine-grain (ASA 100) color film capable of producing very sharp prints with good color saturation. Kodacolor 400 (CG) is a high-speed (ASA 400) film made for use in low-light or action situations. Vericolor II Professional (VPS) (ASA 100) is one of Kodak's "professional" films that can be used for high-quality color prints, particularly for good skin tones. Type S Vericolor II Professional is designed to be used for exposures of 1/10 second or shorter while Vericolor II Professional, Type L (ASA 50), which is only available in 120 size and sheet-film sizes, is recommended when using exposure times ranging from 1/50 second to 60 seconds. Type L is balanced for 3200°K (tungsten) illumination while the other three types of color negative film are balanced for daylight and electronic flash.

If you want to shoot slides, there are even more films to choose from. Beginning with the slowest and consequently the finest-grained of the Kodak color slide films, there is Kodachrome 25 (KM), then Kodachrome 40 (KPA) and finally Kodachrome 64 (KR) Film. Kodachrome 25 and 64 are both balanced for daylight and flash while Kodachrome 40 is balanced for photoflood (3400°K) illumination. All three are among the finest color films made, for resolution, sharpness and color fidelity. These films have to be processed by Kodak, as the processing procedure is extremely expensive and complex.

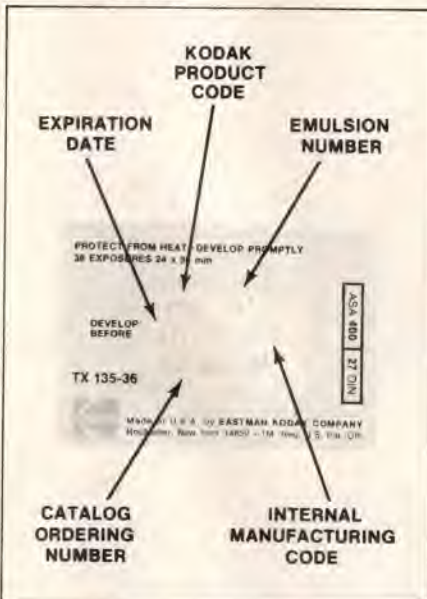
Among the color slide films that can be processed at home or by private labs are the E-6 Ektachrome films. They range in speed from ASA

ONE TO ONE

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MAKING BASIC CHOICES

64 to ASA 400 with an intermediate speed of ASA 160 reserved for Type B or tungsten film. There is also an ASA 200 daylight-balanced film. The Ektachromes are designated ER, ET, ED and EL for ASAs 64, 160, 200 and 400, respectively. The advantage of the Ektachrome slide films is that they can be easily and quickly processed and can be exotically altered by push- or pull-processing to achieve any number of different usable film speeds.



Did you ever wonder what the numbers on the side of the little yellow box mean? Now you know.

In addition to these four Ektachrome films, there are four 35mm Ektachrome films designated by Kodak as "professional" films (EPY, EPR, etc.). The distinction between the two types of films is that the "amateur" films can remain in the camera for an extended period of time without damage while the professional films must be refrigerated before and after use and should be processed directly after exposure or as soon thereafter as possible. The professional Ektachromes also come with film speeds that can vary up to 1/2 f-stop in either direction. The individual film speed is labeled on each box and film sheet. There is one addition, Ektachrome 50 Professional, and one deletion (there is no Ektachrome 400 Professional) among these films.

If you want black-and-white prints,

there are three basic film types you can choose from: Tri-X (TX), Plus-X (PX), and Panatomic-X (FX). Of course, if you shoot 120-size film, Verichrome Pan (VP) is also an excellent medium-speed, general-purpose film. Tri-X is the fastest (ASA 400) but also displays increased grain. However, it is adaptable to many different photographic situations and compatible with a great many different developers. Plus-X (ASA 125) is an intermediate-speed film with moderately fine grain and good resolution. Panatomic-X (ASA 32) is an extremely fine-grain film suitable for extreme enlargements.

Characteristically, the faster the film, the more exposure latitude and different tonal gradations it can produce. So, Tri-X naturally has less contrast than Panatomic-X. However, the sharper, fine-grained Panatomic-X also has less exposure latitude than Tri-X.

As you can see, the demands of your photography will dictate to a large degree what type of film you should use. To further complicate matters, there are literally hundreds more types of film; not only those made by Kodak, but those made by scores of other companies like Agfa, Fuji, Ilford and others as well. Such unusual film stocks as superfast Kodak 2475 Recording Film, which can be used for night surveillance photography, or Eastman Color Negative Film, Type 5247, which is used in the movie industry to yield both a negative and positive image, are both specialized films with rather unique and specific uses. When you know the limits of your photography, and what you want your pictures to say or do, film choice becomes logical.

Regarding your question on the specific information found on the side of the Kodak film box, it is really quite ordinary. By now you can probably guess that "TX 135-36" means Kodak Tri-X film, 35mm size, 36 exposures. The illustration shown on this page describes the additional information.

Well, perhaps now you know more about Kodak films than you did before. I am constantly amazed at not only the number of films available but the uses to which they can be put. For fun some evening check out the different film sections of the *Kodak Photographic Products Guide* (publication No. P2-1), which may be obtained by writing Eastman Kodak Co., 343 State Street, Rochester, New York 14650. You will be amazed and entertained, and the experience just might give you some new insight for solving those ever-expanding photographic problems. ☐

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A lot of SLRs have been made smaller lately, but unfortunately, their lenses haven't. Pentax decided to design 18 ultra-thin, ultra-light M-series lenses for use on the MX. Of course, our regular Pentax lenses also fit the MX. So there are over 40 interchangeable Pentax lenses available, from 1,000mm telephoto to 17mm fisheye. All have the Pentax bayonet mount, which is becoming the standard of the industry. And all have Super-Multi-Coating, a process we invented and perfected.

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DATA BACKS AND 250 EXPOSURE BACK

The back of the MX accepts the Pentax Bulk Film Magazine and data back. If you have a lot to shoot, the Bulk Film Magazine holds 250 frames. With the Dial Data MX, your MX becomes a data camera. On each exposure, your choice of alpha/numeric data is imprinted automatically. And our Data MX camera comes complete with a built-in clock, so you can imprint the time, date and more on each frame.

All in all, the Pentax MX is a formidable camera, the heart of a superb, sophisticated, professional system. It's the result of years of meticulous research and exhaustive testing. We wouldn't have it any other way. And we don't think you would either.

For more information, write: Pentax MX, P.O. Box 2585, Littleton, CO 80161

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Kodacolor II film when brilliant reproduction is all-important.

Let your imagination roam with Kodacolor II film. As a creative medium, it offers brilliant color reproduction, excellent sharpness, and micro-fine grain. The wide latitude of this color negative film is forgiving of minor exposure errors. And the moderately fast speed enables you to shoot under a wide variety of daylight conditions. Speed, 100. Grain, micro-fine. Resolving power, high.



Catamaran, Biscayne Bay, Florida. 15-mm lens, 1/500 sec., f/8.



Dual Spinnakers, Gulf Stream.
180-mm lens, 1/1000 sec., f/5.6.



Rickenbacker Causeway, Florida.
24-mm lens, 1/30 sec., f/5.6.



**For the pictures
in your mind.**